

BOROUGH

CHELTENHAM.

### ANNUAL REPORT

OF THE

# SANITARY CONDITION, &C.

OF THE

BOROUGH OF CHELTENHAM.

FOR THE YEAR 1896,

 $\mathbf{B}\mathbf{Y}$ 

J. H. GARRETT, M.D.,

Licentiate in Sanitary Science University of Durham. Diplomate in Public Health University of Cambridge.

MEDICAL OFFICER OF HEALTH.

" Salus Populi Suprema Cex."

PRINTED BY ORDER OF THE SANITARY AUTHORITY.

CHELTENHAM:

JAMES BARRY, WALTHAM HOUSE, SUFFOLK ROAD.

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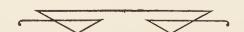
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## BOROUGH OF CHELTENHAM.

#### Public Health Committee.

MR. COUNCILLOR J. C. GRIFFITH, (CHAIRMAN).

MR. ALDERMAN G. NORMAN.

MR. COUNCILLOR M. DAVIS.

MR. COUNCILLOR F. FEENEY.

MR. COUNCILLOR S. LENTHALL.

MR. COUNCILLOR J. V. MOLES.

MR. COUNCILLOR E. PARSONAGE.

MR. COUNCILLOR H. WAGHORNE.

TOWN CLERK—MR. E. T. BRYDGES.

Borough Surveyor—Mr. JOSEPH HALL.

#### Medical Officers' Department.

CHIEF INSPECTOR OF NUISANCES: A. E. HUDSON.

Assistant Inspector: J. H. LONG.

2ND ASSISTANT INSPECTOR: E. JONES.

MEDICAL OFFICER OF HEALTH: J. H. GARRETT, M.D.



To the Chairman and Members of the Public Health Committee.

GENTLEMEN,

I have the honour to present you with my Annual Report for the year 1896.

As before I have to report a busy year, and in fact every year appears to bring a larger amount of work than its predecessor. The special powers which have been obtained for this Borough, and also the various sections of the Public Health Acts applicable to us, have been brought as nearly as possible into routine operation, and our reforming efforts have been unremitted during the past year. We are obtaining or have just obtained, other powers by Provisional Order, or by the adoption of new Bye-laws, which to put into effect will entail further labour, and the work of the Health Department is not therefore likely for the present to grow less. In the course of a few more years however, proceeding at our present rate, we may hope to have made some impress upon the sanitary condition of the town, and if it can never be perfect by reason of unending wear and tear, we shall have brought it nearer to a perfect The summary of work done, which Mr. Inspector condition.

Hudson has taken from the books, will supply evidence of progress in this direction.

In the first half of last year we suffered some anxiety on account of Small-pox in the neighbouring district of Gloucester. Happily the danger has passed and left us rejoicing in the good fortune of our escape. Of other infectious diseases, Diphtheria, which last year was rife in many districts throughout England, visited this district and neighbourhood. But although there were more cases of Diphtheria notified last year than in any previous year since notification of infectious diseases first began with us, the cases here were scattered both as to time and to locality, and the disease was at no time bad enough to be called prevalent, and in this respect we were more fortunate than some of our near neighbours. The numbers of cases of other infectious diseases notified are not particularly notable, and will be found recorded in their proper place.

The Death-rate for last year is just the same as that for the previous year, and is below the average for the last ten years, and altogether I am glad to be able to report a satisfactory record.

As in previous reports, I must acknowledge the assistance I have received, during the past year from the Town Clerk, the Borough Surveyor and their assistants, and I have also to thank Mr. R. Tyrer for his Meteorological Report which will be found appended.

I am, Gentlemen,

Your obedient servant,

J. H. GARRETT.

January 20th, 1897.



### WORK DONE, 1896.

#### SUMMARY.

The following is a Summary of work done by Department, during the year		of the 1	Health
Houses and Premises inspected	1000.		11,648
Ordinary General inspections			2,740
House to House ditto		• • •	
THE A	• • •	• • •	2,348
Re-inspections		• • •	5,336
	•••	• • •	123
Including - ,, Common Lodging-Hou	ses	• • •	55
,, Cowsheds, Dairies, etc.			133
Bakehouses			127
,, Workshops			160
,, houses re infectious disc	ease		626
Complaints received			184
Notices served, on Authority of Committee		wn	
Clerk's Signature		• • •	1,886
Ditto ditto Inspector o	f Nuisan		1,000
Signature			533
Circulars sent referring to notices not complied	a A. zwith	• • •	292
		 to	494
Authorities given under Sec. 41 of the P		to	7.04
Inspector of Nuisance, to open groun	ia, etc.	• • •	164
Corporation Sanitary Certificates granted	• • •	• • •	77
New drains laid and drains relaid	• • •	• • •	213
Drains tested (all with water)	• • •		427
Length, in feet, of stoneware drains laid			16,465
Ditto cast iron ditto			1,726
Brick drains removed			52
Cesspools abolished		• • •	8
Man-hole disconnecting chambers provided		• • •	76
	•••		204
Ditto ditto tested, (all wi			88
Intercepting traps			193
Dip and Bell traps removed		• • •	1,090
		• • •	1,030 $1,122$
		•••	1,122
Rain-water, sink and other waste pipes discon-	nected ire	)111	
drains	• • •	• • •	77
Lead waste pipes provided or repaired	• • •	• • •	129
Lead syphon traps fixed to waste pipes	• • •	• • •	88
Drains cleansed or repaired	• • •		25
Water Closets built		• • •	23
Ditto cleansed or repaired		• • •	9
New W.C. pans of the "Washdown" type fixe	ed		900
W.C.'s unstopped and W.C. pans cleansed			24
Flushing boxes fixed to W.C.'s	• • •	• • •	1,320
Ditto repaired			11
Urinals built and re-constructed			5
Samples of water collected for analysis			$19\overset{\circ}{6}$
The of Manner College and arrange in	• •		100

Wells closed on notice	3
water supply provided to mouses, which, which inspected	
Nuisances from overcrowding abated 26	)
Ditt. Since In ditte	
Ditto granden ditto	
Ditta in out finish W.C. accommodation 10	
Ditta affansiya ditahas	
Harries alasmed and lime method on notice	
Polyobongon ditto ditto	
Slanghton houses ditto	
Workmann ditto	
Common Lodging Houses ditto	
Conveheda ditto	
Houses closed under Sec. 32, Housing of the Working	_
Classes Act, 1890 10	)
Horaco avalla nomainad	
Poofs saves and critters remained	_
Direct in according to the state of	7
= 19 st, 0 st =	3
Accumulations of manure removed 24	
Manure receptacles provided 10	_
Ash receptacles provided 566	
Rooms ditto ditto 238	
Notices to Schools re infectious disease 89	
Ditto Parents ditto 88	
Articles of clothing, bedding, etc., disinfected in Steam	O
Dining for a 1 and 2 700	0
Loads ditto for outside Sanitary Authorities, or	O
by private request 45	3
Articles ditto destroyed by fire by order of M.O.H. 26	

A. E. HUDSON, Sanitary Inspector.

#### IMPROVEMENTS TO DWELLING HOUSES, 1896.

Defective House-Drains Relaid and properly Trapped and Ventilated.—Under Sec. 41 of the Public Health Act, 1875, 164 authorities to enter, open the ground, &c., resulted in the service of 163 specifications, and in these cases the specifications include the amendment of every defect in drainage, &c., that can be discovered on the premises, and generally require the entire re-drainage of the house. The opportunity is taken to demand the affixing of ventilating shafts, with proper inlets, where none have previously existed, and where the drain passes under any part of the dwelling, coated iron pipes of water main strength are invariably ordered. The relaying of house-drains is supervised by the Inspector, and they are all laid with cement joints, and made to stand the hydraulic test. 157 of the 163 specifications made and served in the form of notices under this Section were complied with within a fortnight of the expiration of the year. The length of house-drains laid or relaid last year reached the total of 18,191 feet, this being exclusive of the drainage of new premises.

Flushing of House-Drains and Fixing new Closet Pans.—Cheltenham is entirely a water-closet town, but for long there have existed here closets, running into thousands in number, that are connected with the sewers, and are still without any proper flushing apparatus, being dependent for their flushing upon water carried by hand. The disadvantages and dangers of these conditions I have pointed out in previous reports. The effort that is being made to reduce them is measured for last year by the affixing of so many as 1,320 flushing cisterns to w.c.'s, where none had previously existed. A double benefit has accrued on account of the necessary removal of many hundreds of old insaritary closet pans, which were not of such construction as to allow of their being efficiently flushed through the fall pipe of a flushing cistern. Thus it comes about that the Inspector can report the affixing of 900 "washdown" pans, these having replaced an equal number of long hoppers, old pan and container, and other bad forms.

Removal of Iron "D" Traps.—These are used as surface traps in various situations, and for many years they must have been the regulation traps put in everywhere by the builders and plumbers. We are getting them replaced by stoneware gullies as fast as possible, and over 1,000 such substitutions were last year made.

Increase of W.C. Accommodation.—The condition of one closet being made to suffice for two or more houses is

one that was handed down to us from the times antecedent to the passing of the Public Health Act. During last year we considered that a nuisance was caused in 19 instances of this kind, and as the result of notices served, 23 new closets were erected.

Premises dealt with by Comprehensive Specifications under Sec. 91 Public Health Act, 1875.—98 Notices were served during the year with lengthy specifications of requirements to amend the condition of roofs, walls, floors, yards, eaves, spouting, doors, &c. These resulted in a greatly improved condition of the houses dealt with.

Closing of Houses as Unfit for Human Habitation.—These were houses in a worse condition than the last mentioned, being so bad that they could not be rectified whilst in occupation. Some of them remained closed; an order has been applied for the demolition of one; others have been so altered and improved as to have become again habitable. Usually we have found it sufficient to simply serve a notice, calling on the owners to close the house, without having recourse to the order of a Justice according to the provision of Sec. 32 of the Housing of the Working Classes Act, 1890.

Overcrowding of Dwelling Houses.—Overcrowding is a matter not easily dealt with even in a town like Chelten-The family overcrowding the house is often so poor as not to be able to take a place of larger dimensions. With the mouths of seven or eight children to fill, the weekly earnings cannot be stretched to cover a house rent of some five shillings a week, which is about the lowest sum for which any house can be obtained containing sufficient accommodation in living rooms, bedrooms, conveniences to admit of its being looked upon as a hygienic abode for such a large number of inhabitants. I mean an abode in which there are a sufficient number of apartments, of sufficient size, to give rooms enough, and air enough, for such a family to live cleanly and healthfully, and for the children to have a chance of arriving at a passable degree of physical and moral development. When we find that father, mother and eight children are occupying two small bedrooms in a dirty neglected cottage,

we can so harry them as to compel them to get out of that house, or reduce the number in it. Generally speaking, however, there is a tendency for them soon to gravitate back into the same condition, and the fact is forced upon one that our powers do not contain the remedy of the evil. It may be long ere the duty shall be imposed upon the Local Sanitary Authority to render such assistance to people in this position, by providing them with suitable houses or otherwise, as to leave no excuse for the continuance of overcrowding and the evil effects that accrue from it. The idea has doubtless a tincture that will commend itself to but few people at the present time, and a good many will say the present Poor Law is intended to meet such a case; but if it be, one can only say that it does not do so. Neither does the Housing of the Working Classes Act.

Overcrowding was dealt with in 26 instances during

the year by notices under Sec. 91 Public Health Act.

Houses Cleansed and Limewashed.—Under Sec. 46 Public Health Act, 61 houses were ordered to be cleansed and limewashed, some of them in connection with infectious disease which had occurred in the house, but the majority as usual, simply on account of being found in a filthy and unwholesome condition.

Ash Receptacles Provided.—Fixed ash receptacles of any sort or size in the neighbourhood of any kind should be avoided and abolished wherever possible in favour of movable covered metallic receptacles; these are so comparatively low priced that the fact of their having to be occasionally renewed can be of very little consequence. I am entirely opposed to the building of an ash receptacle to be used in common by two or more cottages. When a strong galvanized iron pail with a lid to hold a week's ashes can be bought for 4/6 every cottage should have one to itself, and the occupier is then responsible for the condition of his own house refuse. The ashes are now collected once a week, and an ash-bin to hold the refuse of a month or two is no longer necessary, and the building of it is discouraged. Its provision is only likely to lead to accumulations. The movable receptacles greatly facilitate the removal of the ashes, and if they were universal, much time and labour would be saved in the collection of house refuse. Under Sec. 27 of the Cheltenham Improvement Act 1889, 566 new ash receptacles were provided in the year as the result of notices served.

#### THE CORPORATION SANITARY CERTIFICATE.

The demand for this Certificate has increased each year since it was decided to grant it, and it has now been three years in vogue. For merely a nominal fee, a person about to take a house, or one who has already got a house, concerning the sanitary condition of which he is doubtful, can secure an official examination of the house, and a certificate when the house is found in as perfect a sanitary condition as it can be made. If faults exist, a list of requirements to bring it up to certificate standard is given. information obtained is so valuable that one is not astonished there should be an increasing call for these certificates, and the matter can only require to be more widely known to receive even a fuller appreciation. I believe the granting of certificates by the Sanitary Authority is a right principle, and a valuable aid in the improvement of house property. The work, however, requires to be carried out with the greatest conscientiousness and circumspection.

The number of houses for which certificates were granted last year was 77, as against 51 in the year previous,

and 33 in the first year.

# LIST OF HOUSES FOR WHICH SANITARY CERTIFICATES HAVE BEEN GRANTED DURING 1896.

Name of House.		An	nual Value.
Alington House, Monson Av	venue		£ 40
Aghfield Dayabill Daya	• • •		130
Avonleigh, Painswick Road	• • •	• • •	55
Bayshill Court	• • •		180
Bayshill Terrace, 14	• • •	• • •	50
Ditto 12	• • •	• • •	56
Ditto 11	• • •	• • •	56
Bradley Villa, Hewlett Road	d		30
Berkeley Hall	• • •		170
Brighton Lodge			36

C1			
Cleeve Lawn, Hale's Road	• • •	• • •	30
Clarence Square, 20	• • •		25
Coddenham Lodge			110
Dinmore House	• • •		60
Eildon, Lansdown Road	• • •		150
Ellesmere House, Cambray			36
Estville, Carlton Street			63
Exmouth Place, 3			30
Gabari, Parabola Road			160
Gransden, Parabola Road	•••		150
Greville Lodge	•••	• • •	65
Harley Lodge, Tivoli	• • •	• • •	80
Hansworth Lodge	• • •	• • •	100
Hatherley Street, 11	• • •	• • •	11
High Street, 423	• • •		35
Imporial Conors 19	• • •	• • •	
Imperial Square, 13	• • •	• • •	$\frac{100}{60}$
Ditto 19	* * *	• • •	60
Ditto 6	· · · ·	• • •	70
Italian Villa, Leckhampton	Road	• • •	45
Kilchberg Villas, 4	• • •		36
Ditto 6	• • •		36
Ditto 7	• • •		36
Lansdown Crescent, 34			50
Ditto 23			60
Ditto 13			80
Lansdown Parade, 17	• • •		30
Ditto 17, (2nd	application	1)	30
Ditto 2	1.1		30
Lansdown Place, 28			80
Lansdown Terrace, 5			55
Ditto 1	•••	• • •	86
Lypiatt Terrace, 11	• • •	• • •	60
Ditto 8	* * *	• • •	80
Lansdown Crescent, 38, (2n	d cortificate	2)	40
		5 <i>)</i>	85
Maythorne, Christ Church I	wau	• • •	65
Montpellier Terrace, 17	• • •	• • •	
Ditto 38	• • •	• • •	26
Montpellier Villas, 12	• • •	• • •	27
Ditto 10	• • •	• • •	$\frac{25}{65}$
Napier House, Pittville	• • •	• • •	65
Oriel Terrace, 4	• • •		30
Orrisdale Terrace, 4	• • •	• • •	24
Painswick Lawn, 5	• • •		35
Park Place, 9	• • •		45
Paragon Parade, 3	•••		40
Ditto 1	• • •		45
Ditto 5	• • •		65
Paxton Lodge, Sydenham R	load	• • •	45
Pembroke House, Bath Roa		• • •	45
(			

Priory Street, 7		• • •	40
Royal Crescent, 16			60
Seagrave Place, 5	• • •		45
Ditto 4		• • •	45
Spa Buildings, 3		• • •	45
Ditto 10		• • •	55
Sherwood, Priory Street	• • •	• • •	50
St. George's Place, 6	5 • •	• • •	20
Ditto 59	• • •	• • •	11
St. Edmund's, Tivoli		- • • •	80
St. John's House, Hewlett S	Street		30
Sydenham Villas, 9	• • •		50
Sydenham Lawn	• • •		65
Sydenham Villas, 11	• • •		46
Suffolk Square, 17		• • •	86
Wellington Square, West, 1	• • •	J 0 0	45
Wellington Square, 11	• • •	• • •	42
York Lodge, Bayshill	• • •	• • •	65

The following Abstract of Requirements and Recommendations for this Certificate has been drawn up by Mr. HUDSON for the guidance of the builders or persons applying for the certificate.

# Borough Sanitary Gertificate.

#### ABSTRACT OF REQUIREMENTS.

1. **Drains**—To be salt-glazed socket-jointed, stone-ware, or cast iron pipes coated with Dr. Angus Smith's Solution, or glass-lined iron pipes, having a minimum internal diameter of 4-in to be laid in straight lines with regular and equal fall of not less than 2-in in 10 feet, to be bedded in concrete and to be provided with intercepting syphon and through ventilation.

All joints to be proved sound by water tests.

2. Soil Pipes—To have a minimum internal diameter of 4-in.; to be carried up full size to a sufficient height and to have the fewest possible bends and angles. Closet connections are to be drawn lead "T" pieces.

3. Ventilation of Drains—To consist of inlet, close to intercepting trap, and outlet or outlets at head of drain.

Soil-pipes should be additional to these outlets unless the soil pipe is at the head of the drain system.

The joints of soil and ventilating pipes to be proved sound by the smoke test, applied by the smoke machine.

4. Water Closets—Closet seats to be hung so as to give access to interior of seat; walls under closet seats to be properly plastered.

Anti-syphonage pipes, 2-in in diameter, to be provided if closets are found to syphon out, such pipes to be united and to terminate in soil-pipes above the topmost closet, or to be carried up to a point as high as the soil-pipe,

- 5. Housemaids' Slop Sinks—To be constructed in every respect as water closets.
- 6. Flushing Cistern to Closet—To be absolutely distinct from domestic service.

  14-in. pipe and valve to be fixed if the hydrostatic head be under 10-ft., 1-in. pipe and valve to be used for heads of 10 feet and upwards.
- 7. **Domestic Water Supply**—A supply from town main direct to be laid on to scullery or other sink.
  - Where more than one tap is fixed over the sink, the drinking water tap to be marked "Drinking."
- 8. Waste Pipes—From sinks, baths, lavatories, etc., to be trapped immediately beneath the fittings and to discharge over or into gully traps above the standing water of the trap.
- 9. Rain Water Pipes—To discharge over or into gully traps.
- 10. **Dust Bins**—To be either brick built, rendered inside with cement and provided with doors and coverings, or galvanized iron bins with tight fitting covers, the latter preferred.

#### RECOMMENDATIONS.

- 1. Intercepting Traps—For man-hole, channel syphons, of the "Winser" type. For pipe shafts, traps of the "Buchan" type.
- 2. Man-Hole—Strongly recommend that a man-hole inspection chamber be built, so as to have means of access to intercepting trap for the purpose of testing, cleansing, or inspecting the drain.
- 3. Water Closets—"Washdowns" for inside use, the outgo of w.c. trap to be connected to soil-pipe by a permanent and reliable joint. For outside use, short hoppers with flush rims, or "Washdowns."
- 4. For Housemaids' Slop Sinks—Short hopper with flush rim.

#### THE COMMON LODGING HOUSES.

During the prevalence of small-pox at Gloucester, a very critical inspection was kept up of the Common Lodging Houses, frequent visits being paid to them. All the proprietors were seen by myself, as well as by the Inspector, on more than one occasion, and warned as to the likelihood of small-pox being brought from Gloucester into their houses, and as to the necessity of instantly notifying any suspicious rash or case of illness of any sort. A circular letter was also addressed to them to the same effect. An outbreak of small-pox occurred in a small house, let in furnished apartments, connected with, and to all intents and purposes a

part of one of the Lodging Houses. The measures that were taken fortunately limited the disease to one family and the one house. The occurrence, however, brought to light the necessity for acquiring powers to restrict the keepers of Common Lodging Houses from taking cottages in the neighbourhood, and letting the rooms as "furnished apartments." It is, of course, a palpable evasion of the bye-laws for the regulation of Common Lodging Houses, and these bye-laws cannot be stretched to cover such cases. The "furnished apartments" are let at an exhorbitant rent, seeing that they contain next to no furniture at all. The temporary tenants may not come into the lodging house for their meals, but there is nothing to prevent the lodging-house keepers supplying them with food, coal, &c., in the "furnished apartments." Such places may become overcrowded to any extent, and filthy to any degree, and no responsibility rests with the landlord, whilst the tenant is a most intangible person, moving away before any notice served on him can be made to take effect. The same conditions must hold in other towns, and where no bye-laws have been adopted for Houses Let in Lodgings, as well as for Common Lodging Houses, the same trick will no doubt be practised, as it is a very convenient and remunerative one.

#### HOUSES LET IN LODGINGS.

Adoption of the Model Bye-laws of the Local Government Board.

In a town of this character there are lodging houses of all kinds, and many of them will be much the better for being submitted to occasional inspection, and regulations as to cleansing, overcrowding, &c. A good many visitors to Cheltenham go into lodgings, and it is hoped by one means and another that more visitors may be attracted here in future. Clean and well kept lodging houses are likely to add considerably to the reputation of our town, and with these considerations in view, as well as those mentioned above in connection with out-letting by the keepers of Common Lodging Houses, the Model Bye-laws of the Local Govern-

ment Board for Houses Let in Lodgings have just been adopted. If in the exercise of the provisions of these byelaws a rivalry is awakened amongst the numerous landlords and landladies of this town, in regard to whom shall have the best kept house to offer would-be lodgers, their adoption will have answered a most admirable purpose.

#### DAIRIES, COWSHEDS, AND MILKSHOPS.

These have been inspected and found in a fairly satisfactory condition. In accordance with the new Bye-laws all the sheds were limewashed. There were 21 applications to be registered as Cowkeepers, Dairymen, or Purveyors of Milk, and 15 were placed on the register. In a Provisional Order obtained last year there is a clause compelling Dairymen supplying milk within the Borough, from premises whether within or beyond the Borough, to notify to the Corporation all cases of infectious disease among persons engaged in or in connection with their Dairies. We already possessed powers to cause any milkseller to furnish us with a list of his customers in the borough, when the outbreak of any infectious disease appears attributable to his milk.

#### FACTORIES AND WORKSHOPS.

One hundred and sixty workshops were visited by the Inspectors, and in 22 instances notices were found to be required for cleansing and limewashing. I am not aware that up to the present any advertisement of the provisions of the Factory and Workshops Act, 1895, has been made in this district, and the owners of all the petty workshops will hardly become aware of the provision of the Act unless brought by some such means to their notice. Before the end of last year it was their duty under the new Act to give notice to the Factory Inspector of the district of their names, and the place, and nature of the business carried on. It is, I think, unlikely that this has been done so far, but I have no doubt the necessary action will be taken to get

the provisions of the Act complied with. We shall be glad to get a copy of the list of workshops, which the Factory Inspector will doubtless send us when he has obtained it.

#### THE BAKEHOUSES.

There is nothing to be said further about the bakehouses this year than that they have all been inspected as usual both by myself and by the Inspectors. and the condition of their walls kept clean by the use of sufficient limewash.

# THE PUBLIC ABATTOIR & PRIVATE SLAUGHTER-HOUSES, INSPECTION OF MEAT, &c.

The Public Abattoir appears to be growing a little in favour with the butchers, if one may judge from the fact of a greater number of animals having been killed there last year than in any previous year, and we hope the prejudice and opposition on the part of the butchers to its use may be disappearing. At the Local Government Board enquiry, upon the application of the Corporation for powers to compulsorily close certain private slaughter-houses, the criticisms and objections of the representatives of the trade who attended the enquiry, as well as the evidence of the officers of the Corporation, were heard by the Government Inspector, and a Provisional Order, containing powers as shown upon another page of this report, was ultimately granted. I believe eventually the advantages and conveniences afforded to the butchers themselves at the Abattoir will become better appreciated by them. The release from their obligations under the bye-laws for regulation of private slaughter-houses; the privilege of using light, clean, and well-kept apartments, where the Corporation itself is responsible for the keeping; the easy disposal of all filth and offal; the use of necessary appliances—a supply of hot water, &c.; and the overlooking of the men by an official: these are points which should commend themselves to the consideration of the Master Butchers as having a decided value. The Corporation is anxious to accommodate the butchers to the greatest possible extent, and the Public Health Committee has always

listened with attention to any representations made to it on their behalf, and been ready to comply with any feasible suggestions. Before the powers of the new Provisional Order can be put into execution, it will be necessary to increase the size of the Abattoir, and the Borough Surveyor has accordingly received instructions to prepare plans for such an increase. There is, fortunately, plenty of adjacent space to allow of the public slaughter-houses being increased to any required number, both at the present time and hereafter. Besides increased apartments for slaughtering, provision is now to be made for dressing tripe, with the hoped for object of abolishing certain small establishments where this "offensive trade" is carried on, and to prevent the establishment of other similar places. This is an undoubted want, and should be provided for in connection with every public slaughter-house.

The Superintendent of the Abattoir reports the animals, with a few exceptions, to have been healthy and of good quality. On a few occasions during the year he reported the occurrence of some illness in the living animals, or some abnormal condition in the carcass or visceral organs, discovered after the animals were slaughtered. This lead to the destruction, as unfit for human food, of the whole carcass of one pig and of the diseased parts of several other animals.

The number of animals killed in the Public Abattoir last year is as below, and is compared with the number killed in the previous year:—

				1896.		18	895.
Beev	es .			521			300
$Calv\epsilon$	es .			494			152
	р.			3884		2	064
Lam				854			287
Pork	Pigs	• •		1746		1	.642
Baco	n Pig	gs		227			279
						_	
Total	l Anii	mals		7726		4	724
Increas	se in	1896	over	1895,	3002	Ani	imals.

The following is a list of the butchers who used the Abattoir last year:—

Mr. Ashcroft	77 High Street
Mr. Carrick	294 High Street
Mr. W. C. Davis	244 High Street
Mrs. Fisher	294 High Street
Miss Gwinnell	Winchcombe Street
Mr. Jackson (Grocer)	High Street
Mr. Lane	267 High Street
Mr. Lloyd	High Street
Mr. Moody	9 Winchcombe Place
Mrs. Pleydell	High Street
Mr. Pugh	341 High Street
Messrs. Waghorne Bros	346 High Street
Mr. F. Waghorne	4 Tivoli Buildings
Mr. Wilcocks	44 Tewkesbury Road
Mrs. Willis	Winchcombe Street
Mr. G. Willis	,,

The private slaughter-houses and butchers' shops have been inspected as often as practicable, and the provisions of the bye-laws have been fairly well complied with. Excepting for the things taken and destroyed at the abattoir as mentioned above, there were no seizures of meat last year, and I believe the prosecutions we have had in previous years have been of advantage in causing greater care to be taken as to the quality of meat exposed for sale.

In this connection may be mentioned the destruction last year of fish as unfit for food, weighing in all about 4 cwt.

# NEW POWERS BY PROVISIONAL ORDER AS TO PRIVATE SLAUGHTER-HOUSES.

Application having been made to the Local Government Board, a Provisional Order has been obtained which embodies amongst other provisions the following important articles as to private Slaughter-houses:—

"Art. VI (I) The Corporation may from time to time by written notice to the owner and occupier of any registered Slaughter-house

within the Borough which from its situation or construction is in the opinion of the Corporation injurious to the public health require that the premises shall cease to be used as a slaughter-house on and after such date (not being less than six months from the service of such notice) as may be specified in the notice and no person shall after such date slaughter in the way of trade any cattle horse sheep or pig on the said premises."

- "(2) If any person acts in contravention of the provisions of sub-division (1) of this article he shall be liable for each offence to a penalty not exceeding five pounds."
- "(3) The Corporation shall make compensation to the owner and occupier of any registered slaughter-house who shall be injuriously affected by any requirement of the Corporation under sub-division (1) of this article such compensation in case of difference to be settled in the manner provided by the Public Health Act 1875."
- "Art VII. Any person deeming himself aggrieved by any requirement of the Corporation under Article VI (1). of this order may appeal to the next practical court of quarter sessions as if the notice of such requirement were an order of a court of summary jurisdiction."

#### WATER SUPPLY.

The year 1896 was, as we may hope an exceptional year in regard to water supply. The total rainfall of the previous four years had been nearly 20 per cent. below the average of the last twenty years, and following upon this came another dry spring and summer last year. The result upon the springs supplying the upper Chelt, and those supplying the Hewlett's Reservoir was very marked, the quantity of water yielded being much below the average. The effect upon the storage at Dowdeswell Reservoir, which is chiefly supplied by the Chelt, was unique so far as our ten years' experience goes, ten years being the time that has elapsed since the building of the reservoir. In every year until last year the reservoir was filled to overflowing by the winter rains, a large volume of waste water going over the weir into the brook below. Last year with an ordinary

draught upon the reservoir, the supply to the reservoir proved insufficient to fill it at any time, Some time ago in considering the provision of an additional supply of water to Cheltenham, it was thought by some that an increase in the size of this storage reservoir would supply the want. evident however, from our last year's experience, that in very dry seasons the possession of a reservoir of greater size at Dowdeswell would be of no advantage, since at such times there is not water enough to fill the existing lake. Time has proved that the water supply provided by the making of Dowdeswell reservoir, is not so adequate as was supposed, and that neither the occasional failure of the springs, nor the large immediate increase in consumption of water was foreseen by the Authorities at the time this source of supply was under consideration. Apart from any possible growth of the town that might take place, it should have been remembered that a large part of the population was at that time dependent upon shallow wells, and that although the water carriage system of sewage had become general, the water closets were, to a great extent, as yet unflushed by any sufficient supply of water. The several thousands of houses that were previously dependent upon well water, both for drinking and flushing purposes, such well water almost invariably showing signs of pollution by animal matter, are destined within a short time to be connected with the public supply. This is essential not only to avoid the drinking of dangerously polluted well water, which is recognised as being the commonest source of Typhoid fever, but in order that the house-drains and public sewers may be thoroughly flushed out. We have had instances enough of drains and sewers stopped up by insufficiency of water supply, and are fortunately now well on the way to the prevention of this liability, and the danger and unpleasantness attaching to it. Sec. 28 of the Cheltenham Improvement Act which deals with the flushing of water-closets is a most useful measure, and is now being applied with all possible expedition. During the last two years 2,355 new flushing cisterns have actually been affixed to w.c.'s, which previously had been hand-flushed. In the same time 1,136 houses not previously supplied with the town's water have had service pipes laid into them, and have been placed upon the rate books, the additions of last year numbering 562.

Respecting the quality of the water of the Dowdeswell Reservoir, we had a curious experience last year, when the whole of the reservoir was affected by a growth of Crenothrix, which gave it a red colour, and a slight unpleasant odour. The filters at that time available were insufficient to filter at a rate so fast as to supply sufficient water to the town, and at the same time to separate the whole of the minute microscopic spore cells of this growth, which swarmed through the water. It moreover appeared clear that in certain localities these cells multiplied within the watermains. The condition led to numerous complaints both as to the appearance and odour of the water. There was no evidence however, to show that from first to last the organisms produced any worse effect than some slight disturbance in the minds of the consumers. There can be no doubt that it is native to the water, although such a swarming as took place last year is not a common occurrence, and was most likely due to the comparative stagnation of the water, the reservoir never being filled to overflowing, and not therefore having its old water so efficiently diluted and removed as in former years. The redness appears to have been of gradual development, beginning perhaps in February. It was first noticed on March 1st, and disappeared rather suddenly in the second week of June. A fuller description of the visitation, with illustrations and descriptions of the organism in its various forms, will be found in "Public Health" for October, 1896, under the title of "Crenothrix polyspora var. Cheltonensis." The additional filters at Dowdeswell, and the large new tank to receive filtered water, which I mentioned in my last report as being about to be built, were completed towards the latter part of last summer, and are now in use. Consequent upon the carrying out of this work we are now able to submit the water to filtration at so slow and constant a rate as to ensure a first-class product, and if ever the Crenothrix affects the water again the Water Engineer hopes to be in a position to prevent it getting access to the water-mains.

Owing to the small quantity of water remaining at Dowdeswell at the beginning of August, it became necessary to bring into general use the water of the Severn, and the water supplied from that source, and well filtered at Tewkesbury, gave general satisfaction. In appearance,

palatability, &c., it compared very favourably with the water affected by the Crenothrix, and for some months was the best water available in the Borough.

#### THE TOWN SEWERAGE.

As will be remembered. the town is being taken district by district in a systematic attempt to improve the whole of its sewerage. A good many places can be pointed to where the sewers are of out-of-date construction and very badly laid, and it is important that this great work should be proceeded with as rapidly as possible. In my last Annual Report I was able to state that the Borough Surveyor had prepared a report and plans for the re-sewering of No. 1 The necessary Local Government Board Enquiry was held, though not until six months after the application had been made, and permission has not even yet been given for the borrowing of the money required for carrying out the work, a hitch having occurred in connection with a suggested storm overflow into the Chelt. It is a tiresome delay, as long before this time that work ought to have been completed. In the interim Mr Hall has proceeded with the preparation of a report and plans for No. 2 District, and this is in such an advanced condition that application is likely to be made to the Local Government Board almost immediately for powers to obtain money to carry that out also.

#### LEGAL PROCEEDINGS.

The legal proceedings which we were obliged to take last year were fortunately fewer in number than those we had to take in the two or three years immediately previous, although more notices were served and more work accomplished. The objections raised to carrying out our requirements are fewer, comparatively, than they were, owing, as I

believe, to the people having become more accustomed to be called upon to do necessary work, and otherwise act in conformity with the law. As the people become educated to what is best for themselves, and grow to understand that all our action is for their benefit, their prejudices may be expected to die a natural death.

The following are the only cases brought into Court last year:—

For Breach of Bye-laws Regulating Common Lodging Houses.—Three summonses were issued, but one was withdrawn on a promise being made not to allow the offence to occur again. The offences committed were overcrowding of lodgers in the sleeping rooms, and improperly mixing the two sexes. The two defendants were fined 10s. and 7s. costs each.

For Refusing to Comply with Notice to Fix Flushing Apparatus to W.C.—Fined 1s. and costs, the Magistrates also ordering the work to be done. The notice was then complied with.

#### THE ISOLATION OF INFECTIOUS DISEASES.

The Infectious Diseases Hospitals here were utilised to as full an extent as circumstances permitted last year for isolation of the cases of Scarlet Fever, and all the Small Pox cases which occurred were sent there. The Diphtheria Wards, which are in course of construction, not being ready, none of the more than usually numerous cases of Diphtheria could be sent there; several, however, of the worst cases were received into the General Hospital. The treatment of Diphtheria cases in the Common Wards of General Hospitals is in my opinion a most questionable procedure, for although cases may be so treated, and no extension of the disease to the patients in adjacent beds occur, which was the happy experience in the General Hospital here last year, surely nobody will be found to deny that

there is a direct danger. There are also indirect dangers, such as the introduction by error of diagnosis of cases of Scarlet Fever, Measles, and Mumps. On the other hand it is argued, with some reason, that frequently an Infectious Hospital has no resident Medical Attendant, which is a disadvantage in such a disease as Diphtheria, where urgency of symptoms may suddenly arise; whereas there are generally two resident medical men at a General Hospital. In our own case the Medical Attendant of the Infectious Hospital lives some short distance away from the Hospital, but is now in connection with it by telephone, and can reach it on a bicycle in five minutes. No doubt a resident Medical Officer is a desirable provision, but in the numberless hospitals now being erected for small urban and rural districts it is impossible that there can be one, the number of cases to be treated being too few and fluctuating to admit of such an appointment being made.

Apart from the fact of there being a resident doctor, however, patients are better off in many respects in these hospitals than in private houses, inasmuch as they are placed in hygienic apartments and are in the care of good nurses.

The cases of Diphtheria that went to the General Hospital last year were treated with great skill. I hear of four tracheotomies in succession all recovering. This is quite a record, and reflects great credit upon the house surgeon Dr. Phillips, and others of the staff.

As regards Small Pox, we should have fared ill last year but for the Small Pox Hospital. The public wards of this building are only intended to accommodate eight patients, four of either sex. It is always possible, on account of inequality of sex in the cases that arise, for a hospital intended for eight patients to be unable to take in the first eight cases that occur, as four

men and one woman will fill the hospital for men. As soon as it became evident that Small Pox was becoming epidemic at Gloucester, the desirability of increasing our isolation accommodation for this disease was appreciated, and a corrugated iron hospital, that had been previously in use in a Scarlet Fever epidemic, but which had afterwards been pulled down and the corrugated iron disinfected and stored, was enlarged, re-erected, and lined with new wood, to serve

for Small Pox. Further, when the Small Pox grew worse at Gloucester, which is only eight miles distant, and it

seemed impossible for us to escape more numerous introductions here, to say nothing of the possible spread. I advised preparations to be made for the erection of tent hospitals on the ground adjoining the permanent hospital. The ground was levelled, and drains put in in readiness, and arrangements made with a maker of hospital tents in London to send down a tent or tents at 24 hours' notice. It happened, fortunately however, that these additional hospitals were not destined to be called into use, for we never had more cases at any one time than could be accommodated in the permanent Hospital.

#### PRESENT ACCOMMODATION FOR ISOLATION OF IN-FECTIOUS DISEASES AT DELANCEY HOSPITAL IN THE PERMANENT WARDS (Public & Private).

For Small Pox ... ... 10 beds ,, Scarlet Fever ... ... 40 ,, ,, Typhoid Fever ... ... 14 ,, ,, Diphtheria (ready shortly) ... 8 ,,

At an urgent call the accommodation could be increased by extra beds in the convalescent and isolation wards, &c., to the extent of 30 or 40 more beds. It would be very undesirable to so crowd the hospital, however, and to avoid this, temporary hospitals would be advised under pressure of any great epidemic. The galvanized iron, wood-lined building, put up in readiness for Small Pox is standing, and not having been infected can be brought into use for whatever purpose required.

In addition to the above the Cheltenham Boys' College has its own separate wards, adjoining the Delancey Hospital, with 16 beds. The Ladies' College has also its own infectious Sanatorium on another site.



#### VACCINATION.

The subject of vaccination was forced into prominence last year, when we were considering every means of preventing the introduction of Small-pox from Gloucester. latter town as is well known, was an Antivaccinist stronghold, and from it as a centre the sedition spread to the surrounding districts, including our own. The Vaccination Authority i.e. the Board of Guardians of this Union, has all along exhibited a weak front towards this question, and its action has been vacillating and ineffective both before, during and since the Gloucester epidemic. Some two or three years ago it was resolved that prosecutions for non-compliance with the law requiring vaccination of infants should cease. It accordingly ceased, and the result is of great significance as proving that without compulsion, the performance of vaccination would become absolutely irregular, and as a preventive measure against Small-pox be practically in-The number of births in Cheltenham Borough is from 1,000 to 1,100 per annum, and just previous to the passing of the above resolution the average annual number of children vaccinated by the Public Vaccinator was from In the first year after passing this resolution suspending prosecutions, the number vaccinated by the Public Vaccinator was 15, (June to June); his office had become a troublesome sinecure and he has lately resigned it. Last year under pressure of a great scare, the Guardians rescinded their resolution, having appointed a new Vaccination Officer in the person of a young lady, upon whom devolved the duty of obtaining and giving evidence against On her also fell the very difficult or impossible task of rectifying the vaccination records. It was not until October, when the danger of the epidemic had passed over, that a batch of summonses was issued. One was taken as a test case, with a result that an order was made by the Bench for vaccination to be done within 28 days, but no fine was imposed, nor did the defendants pay the costs. of defaulters in the town must be still very large, and be increasing, as comparatively few children are even now brought to the Public Vaccination Station. On January 25th a meeting of the medical men of the town took place at the Municipal Offices, the object being to exert some influence if possible, by an expression as to the efficacy of vaccination,

and the urgent need of putting the act in force at this time. 24 active practitioners of the town came together on that occasion, and 12 letters were received from others unable to attend, expressing their sympathy with the object in view. The meeting, and apparently, the whole profession of the town were in unanimity over it, and the following resolutions were carried, nem. con.

- (1) "That this meeting is unanimous in its belief in the protective power of vaccination and re-vaccination against the infection of Small-pox.
- (2) "That in view of the existence of the disease in neighbouring towns with which there is constant communication, and the occurrence in Cheltenham of 5 cases of Small-pox (all of which have been carefully isolated) this meeting strongly urges the immediate vaccination of all unvaccinated children, not only in the interests of the community to which they are a constant source of danger, but for their own safety and protection.
- (3) "That this meeting wishes to emphasize the necessity of re-vaccination. Whilst recognising and believing that vaccination in infancy does exercise an influence through the whole of life, yet the further protection afforded by re-vaccination has been of late conclusively proved."
- (4) "That this meeting desires earnestly to call the attention of the Board of Guardians to the urgent necessity for carrying out strictly the provisions of the Vaccination Acts, and to urge upon them the importance of instructing their Vaccination Officers to at once take the necessary steps to that end."

It was further resolved that copies of these resolutions should be sent to the Board of Guardians and to the Public Press, and this was done. Additional representations of a similar nature were made to the Guardians by the Town Council. Time however went on to the end of March, when the outlook had grown most serious, but the Guardians had taken no action to enforce the Vaccination Acts, nor did it appear likely that they, as Vaccination Authority, would do anything to further the prevention of Small-pox by vaccination and re-vaccination. It was consequently proposed by

the Chairman of the Health Committee (Major J. C. Griffith) that the Corporation should advertise and undertake a gratuitious vaccination and re-vaccination with calf lymph. The proposition found favour with the Health Committee but before the minute embodying the resolution was brought before the Council, a deputation from the Health Committee, headed by the Chairman, waited upon the Board of Guardians, and expressed their views of the necessity of some special effort being made to get the people vaccinated and revaccinated, and put it to the Guardians whether they would undertake the work, or whether they were agreeable to the Corporation doing it for them. The expressions of the Guardians were towards the latter course, no compulsion being proposed, and it was suggested by one of them that the Local Government Board should be afterwards approached with the view of getting permission for the transfer of the expense to which the Corporation would be put, to the Board of Guardians.

The Resolution of the Corporation in regard to this matter was speedily put into effect in the following way. A letter as follows was sent to all the active medical men in the Town.

"Dear Sir,

The Public Health Committee are desirous of getting as many people vaccinated and re-vaccinated as possible, with a view of preventing the epidemic of small-pox at Gloucester spreading to Cheltenham. It is proposed that the Corporation shall pay a fee, not to exceed 2/6 per case for successful vaccinations with calf lymph, and I am directed to ascertain by this circular letter what Medical Practitioners in this town would be willing to assist in preventing small-pox by such gratuitious vaccination of the poorer people.

The following appear to me to be the best practical methods of carrying such vaccination into effect:—

- (1) The Medical Practitioner to vaccinate gratuitiously at his house every day during one hour in the morning and one hour in the evening.
- (2) The Medical Practitioner to call at the houses of the people, when requested to do so to vaccinate gratuitiously.
- (3) Several vaccination stations to be established in the poorer quarters, at which one Medical Practitioner or another will attend at stated hours morning and evening.

A reply by return of post, stating whether you are agreeable to carry out either or all of the above suggestions, will much oblige.

Yours very truly,

Health Department,

J. H. GARRETT.

Municipal Offices, March 20th, 1896.

Replies were received from 24 medical men stating their willingness to comply with some or all of the above suggestions. Eight vaccination stations were consequently established, including the General Hospital, the two Dispensaries, and rooms hired for the purpose and commanding thickly inhabited localities. Arrangements were made to suit the different medical men as to time of attendance at these stations, and at their own houses, and a letter advising them of the arrangements made, similar to the following, was sent to each.

"Dear Sir,

The Council has agreed to pay 2/6 per case as proposed, for vaccination with calf lymph. I am about to advertise your name in the following connections. Kindly let me have a line by return stating if agreeable (printing has to be done on Monday morning). The station will be ready Tuesday and after until further notice. Books of certificates will be supplied you as a means of computing the numbers vaccinated.

- (1) To attend at 1, Westbourne Terrace, St. Paul's Road, at 10 a.m. Mondays and Thursdays, and at 6 p.m. Wednesdays and Saturdays.
- (2) To vaccinate at your house from 1 to 2 p.m., and from 6 to 7 p.m. daily.
- (3) To visit any house in response to a call to go for the purpose of vaccinating several members of the household, whether the message be brought to your house, or whether you find it awaiting you at the above station.

Dr. Bevan.

Yours truly,

J. H. GARRETT.

Health Department,
Municipal Offices,
Cheltenham.

March 26th, 1896.

The provision thus made for public vaccination by the Corporation worked well and smoothly. It was advertised by a hand bill and by posters, wherein the names of the doctors vaccinating and the times and places of their attendance were set forth. A circular letter was also addressed to the chief employers of labour in the town, asking them to do their best to persuade their employees to be vaccinated. At the end of six weeks the stations were closed as no more people were coming to them. The certificate counterfoils sent in by the 24 vaccinators, showed the number vaccinated and re-vaccinated to have been 9,239. These were distributed as follows:—

No. of vaccination		Primary	Primary vaccinations distributed according to age.			
up.	certificates filled up.  Re-vaccinations vaccinat		0 to 1 year	1 to 14 years	14 years and upwards	
9,239	7,629	1,610	274	1,003	333	

The sum of over £1,100 due to the vaccinators for these vaccinations is about to be paid by the Board of Guardians, the Local Government Board having, in this solitary and urgent instance, sanctioned the transference of the debt from the Corporation to the Guardians by appointing the whole twenty-four medical men who did the vaccination, Deputy Public Vaccinators, their duties to commence from March 31st, i.e. from the commencement of this special This was facilitated by the Guardians having been induced to express themselves agreeable to take over the responsibility, thereby acknowledging that they were the Vaccinating Authority, whose proper business it was to have done the work. A very large number of vaccinations and re-vaccinations were, during the same period, done privately by the medical men of the town, but the number done at the Public Vaccination Station was comparatively small, being 390 only for the whole of 1896; this number including many re-vaccinations.



#### VITAL STATISTICS.

#### SUMMARY.

Area of Municipal Boro	ugh			• • •	4	4,677 acres.
Rateable Value						£270,312
Present Population (abo	ut)			•••		10,000
Population 1891 Census					• • •	
Persons per Acre						10.4
Average number of Pers	ons per	house	1891	census	• • •	4.9
Death-rate 1896	POL	110 450		1000 living		
Average Death-rate for	previou	ıs 10	Por	1000 1111110	111111001	10.0
years						16.9
Birth-rate, 1896	• • •	• • •		,,		21.2
Average Birth-rate for	nrevion	g 10		,,	"	21.2
	-					22.5
years	٠	1.7\	7.00	))	,,	
Infant Death-rate (under	r 1 year	old) p	er 100	)U births		135

#### THE BOROUGH OF CHELTENHAM.

Cheltenham has a good reputation as a pleasant and healthy inland place of residence. A good many visitors come here, especially in the Winter, seeking change of air, and to take part in the indoor and outdoor pleasures here afforded in the shape of hunting, golf, and the dances and other entertainments of the season. The medicinal waters of Cheltenham, which, at one time attracted many people here, including the king and his following, still remain to the town, and latterly the idea of reviving the use of these waters has been much discussed, and it appears likely that some new Spa buildings with baths, etc., will be erected by the Corporation by whom the chief wells are now owned. The colleges and schools are now of the first importance to Cheltenham, having won for it a new renown, and to them has chiefly to be credited its present prosperity. Education on the most modern lines is here afforded to both girls and boys, and the fame of Cheltenham as an Educational Centre is wide spread, and is the means of bringing numerous families to the town. The relatively large proportion of houses of large size inhabited by people of independent means gives the place an aspect of importance, and a rich profusion of gardens and well grown avenues, a picturesque

surrounding country, and the fact of the town being admirably served with all the necessaries and luxuries of life, by a large number of excellent shops, combine to make it a favourite place of residence.

ALTITUDE ABOVE MEAN SEA LEVEL.—The altitude of the town is much greater than generally supposed. The following altitudes are taken from the Government Ordnance Survey Maps.

$\operatorname{Feet}$	Feet
Pittville Circus 205 Painswick Road	
All Saints' Church 212 Leckhampton Road	258
Town side of Railway Statio	n
St. John's Church 220 Ladies' College Sanatoriu	m 342
Oakley Road, Battledown 320 Top of Leckhampton Hill	964
Battledown House 429 General Hospital	222
St. Margaret's Terrace 200 East Glo'ster Cricket Ground	nd 255
Royal Crescent 189 Charlton Kings, London Ro	ad 295
At Ryeworth Lane	
Elm Street, Tewkesbury Road 164 Prestbury Church	258
Lowest part of the Town	
Lansdown place 219 Road to Winchcombe	786
Highest Point	
	1058
At Christ Church Road	

POPULATION.—My estimate of our population remains at the same figure as last year, 49,000. The natural increase, or increase of births over total deaths in the Borough was 197.

The Death-Rate is extremely low for the chief residential wards. The Death-rate for the whole town is also low, notwithstanding that the advantage of having so many well-to-do residents is counterbalanced by the existence of extensive poor class districts, and many of our poor here are of the poorest, being less well off than the artisan class of manufacturing towns where more regular employment is obtained.

The total deaths in the Borough numbered 844, and 18 of these were imported from outside districts into our General Hospital or Workhouse Infirmary. The net number of 826 is the same as last year minus one, and gives the same death-rate as last year, 16·8. The average death-rate for the previous 10 years is 16·9.

ZYMOTIC DEATH-RATE.—The zymotic deaths of last year were greatly heightened by an epidemic of measles, and the figure 1.79 per thousand living is the highest figure recorded for many years, and will be the means of raising the average for some years to come. More than 50 per cent of it was due to measles. This should be sufficient to prove the seriousness of measles, and its importance in regard to our vital statistics. The average zymotic death-rate for the previous 10 years is .90.

Infant Mortality.—135 per 1,000 children born is lower than last year, and would have been much lower but for the measles epidemic. The average rate for the previous 10 years is 146.

The Birth-Rate of 21.24 is again very low, and below our ten years' average, being, in fact, one of the lowest in the kingdom. The average birth-rate for the previous 10 years is 22.5.



1.7916.8 1896 1041 826 135 113 88 Table of Statistics for the last 10 years, shewing Deaths from Chief Zymotic Diseases, and Zymotic Death-rate, and Total Deaths and General Death-rate; also Total Births and Birth-rate per 1,000, and (under 1 year old) 1070 .75 21.8 1895 16.8 Population for first 7 years, 44,000, for last 3 years, 49,000 827 156 37 1008 1894 20.5.53 14.9 128 732 : 01 F 4 W CJ 00 26 1893 22.5 1.06 17.4 993 167 769 123 8 9 ... 6 20 47 1892 21.4 1.50 18.0 943 135 794 :4 - 0 4 - 1 99 2.21 1891 22.4 .43 132 772987 19 1890 16.7 21.7 .67 155 737  $95\tilde{5}$ 43 :,0484 1889 15.8 22.5 89. 969 991 137 :0100 1-30 1888 1033 1.38 17.2 23.7 758 157 61 1887 1049 23.8 06. 18.1 156 798 40 :000104 Infant Death-rate per 1,000 children born. • • • : • Total deaths from seven chief Zymotics ... Infant Death-rate (per 1,000 born) • • . Total deaths belonging to District • • Death-rate from Chief Zymotics Enteric and Continued Fevers • : : General Death-rate Diphtheria ...
Whooping Cough Total Births... Scarlet Fever Small Pox Birth-rate Diarrhœa Measles

#### WARD DEATH=RATES.

In the following table will be found the death-rates of each of the six wards of the town, calculated on the populations of the wards at the 1891 census. The deaths in the institutions are not included in the deaths of the ward in which either institution is situated.

# DISTRIBUTION OF DEATHS IN WARDS AND IN INSTITUTIONS, WITH DEATH RATE IN EACH WARD FOR YEAR 1896.

Wards (excluding Institutions).	Population 1891 Census.	Deaths.	Death Rate per 1000 living.
North Ward South Ward East Ward West Ward Central Ward Middle Ward	8,020 8.242 6,039 6,553	159 133 126 67 123 102	16·24 16·58 15·28 11·09 18·77 11·50
Institutions.			
General Hospital  (Including 11 not belonging Workhouse  (Including 7 not belonging Nazareth House  Children's Hospital	to District).  to District).	56 78 5 2	

The West Ward which is the most favoured in regard to quality of population shows the lowest Death-rate this year, but the Middle Ward shows a rate almost as favourable. The death-rate in the Central Ward has been abnormally raised again this year, as it was in 1895, by a very large number of deaths of people over 70 years of age; out of a total of 122 deaths in this ward, 45 were over 70. As in 1895, so in 1896, the Central Ward had most deaths from lung diseases. The deaths from lung diseases, however, were altogether fewer this year than last year, owing probably to a great diminution in Influenza. The North Ward, as might

be expected from the fact of its being populated almost entirely by the working class, shows by far the highest death-rate among infants under 1 year old.

### TABLE SHOWING DEATH-RATES PER 1,000 LIVING IN THE SEVERAL WARDS, 1896.

Of Infants 1 year old and under; of Old People over 70 years of age; and from Lung Diseases, including Phthisis, Pneumonia and Bronchitis.

	North Ward.	South Ward.	East Ward.	West Ward.	Central Ward.	Middle Ward.
1 year old and under	5.3	2.7	2.0	1.1	2.7	1.4
Over 70 years old	2.3	4.9	3.8	4•4	6.8	3.6
Lung Diseases	2•4	2.8	2.7	1.1	3.9	2.7

In the following lists the figures represent the Ages at Death. The whole of the deaths of the year being shown in the respective streets in which they occurred.

#### NORTH WARD.

Albert street, St. Paul's		bronchitis 64
Buckle's cottages		inanitia 1
Burton street	• • •	measles 1, syphilis 1, bronchitis 47, old age 71, tubercular phthisis 42
Bloomsbury street		
Carlton place W		
Chapel street		old age 83
Cleveland street		imperfect rectum operation 1, phthisis 18
Dovey's cottages		cerebral anæmia 1
Ebenezer cottages		diarrhœa·1
Elm place		syphilis 1
Elm street		congestion of lungs 1
Granville street		dentition 1, cerebro-spinal meningitis 1,
		heart disease 87, 15
Gas Works	• • •	
Gloucester Road	• • •	heart disease 19

Grove street			massles 2 lawresitis 2 diambas 1
Green's passage	• • •	• • •	measles 2, laryngitis 2, diarrhea 1
High street	• • •	• • •	marasmus 4, measles 1 cirrhosis of liver 56, old age 74, laryngitis 5,
	• • •	• • •	pneumonia 23, debility 1, phthisis 34,
			endocarditis 8, nephritis 16, heart disease
			59
Hanover street	• • •		bronchitis 84
Hungerford street	• • •		old age 69, tuberculosis 1
Hereford place	• • •		measles 1, cancer 58
King street gardens			pneumonia 54
King street	• • •		diarrhœa 1, bronchitis 2
Leighton row	• • •		measles 2
Lower Alstone	• • •	• • •	measles 11, cancer 72, premature birth 1, 1, rheumatism 57, exhaustion 1
Market street	• • •		diarrhœa 1
Mossleigh terrace	• • •		mastoid disease 2
Milsom street	• • •	• • •	measles 30, anæmia 1, meningitis 2
Millbrook street	• • •	• • •	old age 84, croup 5
Marsh lane	• • •	• • •	pneumonia 2
Malvern street	• • •	• • •	measles 3, bronchitis 1, gastritis 73, debility
N-11			1, 1, abcess 53, mitral regurgitation 62
Nailsworth terrace	0 + 0	• • •	measles 2, 2
New street	• • •	• • •	measles 4, diarrhœa 2, 1,
Pantile row Park street	• • •	• • •	phthisis 35
	• • •	• • •	convulsions 2
Queen street	• • •	• • •	measles 2, debility 1, paralysis 65, hemiplegia 63, choleraic diarrhœa 68, marasmus 1
Russell street			typhoid fever 27, old age 74
Russell place			old age 89
Retreat, The	• • •		Hodgkin's disease 11
Stoneville street			syphilis 1, apoplexy 38, marasmus 1, gastro
			enteritis 72, premature birth 1
Station street			pneumonia 44, parturition 34
Swindon street			diarrhœa 1, pneumonia 73
Spread Eagle terrac	ee		croup 5
Stanhope street			rheumatism 62, old age 83, measles 1,
*			pneumonia 68, debility 1
St. Paul's street S.			old age 74, debility 1, heart disease 48
Sandfield place			old age 78
Swindon terrace			phthisis 33
Swindon road	• • •		debility 1, paralysis 76, pneumonia 1, cerebral hemorrhage 72
Sun street retreat			hœmophilia 26
Swindon place			marasmus 2, diarrhea 2, kidney disease 51
Selby cottages			pneumonia 2
St. Paul's street N.	• • •	• • •	phthisis 77, 63, locomotor ataxia 67, old age 68
Sun street		• • •	premature birth 1, bronchitis 77, diarrhœa 1, diphtheria 2, hemiplegia 73, gastric
			catarrh 1, convulsions 1
Severn Hill			disease of stomach 77, phthisis 17
Townsend street	• • •	• • •	phthisis 45, renal and hepatic disease 46,
TOWNSOLIG SUICE	• • •		anæmia 61, premature birth 1
			, <u>r</u>

Tewkesbury road ... measles 2, 2, epileptic convulsions 10, heart disease 61, 63, 61, pneumonia 53, cerebral anæmia 1, diarrhæa 1, gastritis 1, phthisis 25, 58, cancer 70, 47, peritonitis 12, cirrhosis of liver 48

Victoria street, St. Paul's ... measles 4 Waterloo street ... tuberculosis 2

Worcester street ... debility 3, premature birth 1, diarrhœa 1, atrophy 1, abcess 1, heart disease 80

White Hart street ... imperfect circulation 1, Bright's disease 66
Yarley cottage ... malnutrition 1

#### THE WORKHOUSE.

old age 80, 75, 81, 89, 72, 89, 85, 81, 85, 70, 87, 80, 81, 78, 85, 83, 85, 72, heart disease 75, 82, 58, 55, 70, 71, 46, cerebral hemorrhage 67, 78, 28, 66, 72, 80, phthisis 31, 36, 29, 65, 39, 32, multiple sclerosis 31, 67, 51, 68, 47, 66, 85, debility 1, 1, bronchitis 47, 84, 62, 58, periostitis of tibia 49, measles 8, hemiplegia 75, malignant disease 82, dementia 77, cancer 53, 82, 49, marasmus 1, 1, 1, epileptic fits 52, 72, 62, umbilical hernia 52, mesenteric disease 3, pneumonia 43, 69, 82, 82, 74, 77, gangrene of foot 72, cirrhosis of liver 54, 60, 75, congenital malformations 1, premature birth 1

#### SOUTH WARD.

tuberculosis 8 Avenalls parade heart disease 36 Albert cottages cerebral softening 77, 66, rheumatism 7, Bath road acute cerebritis 48, cardiac asthenia 63, heart disease 77, 68 Brooksdale cottages ... intracranial hemorrhage 84 phthisis 38, softening of brain 84 Cambray place Corpus street tuberculosis 38 College lawn ... cancer 56 . . . Croft street ... marasmus 1, bronchitis 76 Cooper's cottage convulsions 3 gastric catarrh 1, phthisis 21, hemiplegia 80, Commercial street paraplegia 44 Dovedale villas aneurism 62 cerebro-spinal meningitis 2, old age 84, 88, Dagmar villas heart disease 67 Exmouth street pneumonia 60, tabes mesenterica 2, gastritis 1, Exmouth court bronchitis 1 Exmouth place mitral disease of heart 82 Fairfield place teething 2, marasmus 1, abcess 1 Francis street heart disease 18 . . .

Francis terrace ... measles 2, cancer 33

Francis place...

Gilmour cottages ... bronchitis 1
Great Norwood street ... cancer 69, marasmus 1, accidentally suffo-

cated 1

old age 75

Hermitage street	• • •		tabes mesenterica 2, gastritis 1, heart disease
			68, diarrhœa 1, phthisis 37
High street	• • •		old age 78, 77, heart disease 65, gastritis 39,
0			cerebral hæmorrhage 65
Keynsham road			heart disease 40
Leckhampton road	• • •	•••	instrumental delivery 1, cancer 67, heart
Total Total	• • •	• • •	disease 80, accidentally suffocated 1
Lamb's retreat			angina pectoris 82
Montpellier terrace	• • •	• • •	U 1
Montpellier berrade	• • •	• • •	heart disease 87, 71, phthisis 51, pneumonia 89, old age 79
Montpellier grove			,
Montpellier Baths	• • •	• • •	diabetes mellitus 73, croupous pneumonia 67
Montpellier villas	• • •	• • •	fracture of skull 11
Mitre street	• • •	• • •	bronchitis 78, occlusion of bile duct 1
	• • •	• • •	scirrhus of stomach 61, heart disease 9
Naunton crescent	• • •	- • •	convulsions 1, insanorum paralysis 78,
			phlebitis femoral vein 32, enteritis 1,
NT (1 1			bronchitis 73, heart disease 16
Nazareth house	• • •	• • •	old age 88, 78, 74, apoplexy 74, 75
Norwood terrace	• • •	c • •	lympho-sarcoma 73
Northwick villas	• • •	• • •	ulterine fibroid 54
Pembroke villas	• • •	• • •	heart disease 83
Pilley	• • •	• • •	old age 73, pelvic cellulitis 24, convulsions 1,
			apoplexy 46, heart disease 78, paralysis 70,
			debility 1, bronchitis 81
Paragon buildings			heart disease 91
Paragon parade	• • •		bronchitis 92, cancer 80
Providence terrace			pericarditis 57
Sandford street			old age 80, hemiplegia 67, Bright's disease
			12, convulsions 1, nephritis 6, tuberculosis
			17, heart disease 70
Sydenham road			meningitis 70
Suffolk parade			cancer 74, pleuro-peritoneal-tuberculosis 33,
-			ulceration 12, premature birth 1
Suffolk street			old age 80
Suffolk road			heart disease 65, 54, phthsis 22
Suffolk square	• • •		coma 61
St. Luke's road			debility 1
St. Phillip's street			pneumonia 1, bronchitis 74, typhoid fever 60
St. Phillip's terrace			bronchitis 79
Thirlestane place			marasmus 1
Thirlestane road		• • •	heart disease 66, injuries sustained by a
THILLESUMITE FOMO	• • •	• • •	horse falling on him 34
Upper Bath street	• • •	• • •	paralysis 63, cerebral rheumatism 14,
opper Dath Street	• • •	• • •	marasmus 1
Victoria place			cerebral apoplexy 64, measles 3, gastric
riotoria prace	• • •	• • •	carcinoma 59
Victoria cotto con			phthisis 20, bronchitis 62
Victoria cottages Wellington street	• • •	• • •	diphtheria 2, alcholism 53
Wellington street	•••	• • •	malignant disease 58
Buckingham cottage	e	• • •	tuberculosis 40
Pine Croft	• • •	• • •	MURIOTOSIS 40
		GF	ENERAL HOSPITAL.

#### GENERAL HOSPITAL.

intussusception 1, stricture of urethra 69, tuberculosis 27, 56, tubercular meningitis 5, 7, 8, injuries from fall 57, diphtheria 4, 1, 2, 2, 2, 5, 3,

tonsillitis 2, malignant disease 15, nephritis 20, cancer 42, 44, 80, 51, 21, hypertrophy of prostate 84, measles 1, intestinal obstruction 67, 49, 50, cerebral gumma 16, tabes mesenterica 2, endocarditis 36, pneumonia 59, cerebral hemorrhage 52, 52, cerebral tumour 26, suppurative salpingitis 29, encysted peritoneal abcess 30, accidentally poisoned himself 31, heart disease 62, rheumatism 5, 8, strangulated hernia 66, peritonitis 16, 19, old age 76, gastro enteritis 1, tetanus (result of accidental fall) 72, enteric fever 26, 17, phthisis 33, malignant tumour 56, ovarian cyst 62, cirrhosis of liver 51, empyema 24, 20, tubercular peritonitis 16.

#### EAST WARD.

Albion street		• • •	phthisis 51
All Saints' road		• • •	cancer 71, bronchitis 58, hemiplegia 60
All Saints' terrace			measles 5, phthisis 56
Albert place			shock, result of peritonitis 1
Britannia place			ulcerative tonsillitis 1
Brecon terrace			suicide by hanging 55
Brighton road			cancer 61, hemiplegia 77
Cakebridge terrace			cancer 48
Columbia street			rachitis 1, phthisis 42
Coltham Fields	• • •		heart disease 62
Duke street	• • •		old age 82, 81, emphysema 45, convulsions
			1, measles 2, laryngitis 4
Denmark villas			paralysis 53, measles 1
Fairview street			measles 9, bronchitis 72, teething 2, heart
			disease 59, phthisis 32
Fairview terrace			cancer 47
Fairview road		c + +	dementia 72
Glenfall terrace		• • •	heart disease 46
Hewlett street		• • •	pneumonia 75, bronchial asthma 62, heart
			disease 69
Hewlett place	• • •		heart disease 75
Hewlett road		• • •	natural causes 1, tuberculosis 54, cancer 43
Hartley place	• • •	• • •	heart disease 70
Hale's road	• • •		tonsillitis and quinsy 13, peritonitis 54
High street	• • •		old age 83, heart disease 78
Jersey street			heart disease 31
Keynsham terrace	• • •		pleurisy 74
Keynsham street			marasmus 1
London road	• • •		cancer 57, old age 77, bronchitis 73, cirrhotic
			Bright's disease 80, interstitial hepatitis
			48
Leighton road			suicide by poison 35, phthisis 63, bronchitis
		• • •	82, heart disease 37, 80, alcholism 39
Lennox villas		• • •	hemiplegia 76
Marlborough place	• • •		measles 3
Pittville	• • •	• • •	bronchitis 87, pneumonia 40
Pittville Circus road		• • •	phthisis 58, marasmus 80, paralysis 75
Priory buildings	• • •	• • •	hemiplegia 89
Priory street	• • •	• • •	heart disease 50, 32, cancer 62, gastritis 39,
<i>J</i>	• •	• • •	old age 84
			ord ago or

Priory terrace	• • •	• • •	softening of brain 80
Prestbury road	• • •	• • •	larnygitis 4
Grosvenor terrace	• • •	• • •	diphtheria 2, heart disease 76
Grosvenor street	• • •	• • •	diabetes mellitus 78
Princes street	• • •	• • •	catarrhus 4
Rosehill street	• • •	• • •	broncho-pneumonia 2, phthisis 38, meningitis 2
St. James' street			diphtheria 4, gastro intestinal atrophy 1
St. Ann's Terrace		• • •	bronchitis 1, pneumonia 34, old age 77
Selkirk street	• • •		phthisis 26, cancer 77, 75
Sherborne street			bronchitis 1, debility 1, heart disease 73, 52,
Sidney street			phthisis 61, 8, tuberculosis 2 old age 81, 73
Sidney street Upper Park street	• • •	• • •	heart disease 65, phthisis 14, premature
Opper Lark Sureeu	• • •	• • •	birth 1, accidentally suffocated 1
Union street	•••	• • •	ulceration of leg 75, malignant tumour 53, cancer 43, phthisis 59
Victoria street			measles 2, heart disease 51
Victoria terrace			gastric carcinoma 47
Victoria place			larnygitis 3, old age 80, 74, convulsions 1,
Whaddon Lane			cirrhosis of liver 70, cancer 46
Whitcomb place	• • •		tuberculosis pneumonia 1, diphtheria 2, 4,
			tuberculosis 2, marasmus 1, old age 84
York street			heart disease 79, measles 3, 2, 3, 2
Normandy cottage			heart disease 66
Oswald villa			phthisis 66
		7	WEST WARD.
Ambrose place		7	
Ambrose place			VEST WARD.  cerebral rheumatism 36 marasmus 1
Alstone	• • •		cerebral rheumatism 36 marasmus 1
Alstone Arle		• • • •	cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1
Alstone Arle Bayshill road	• • •		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79
Alstone Arle Bayshill road Bayshill terrace	•••	• • • •	cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1
Alstone Arle Bayshill road Bayshill terrace Christ Church terra	 		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace	•••		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43
Alstone Arle Bayshill road Bayshill terrace Christ Church terra			cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road			cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75,
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace	  ace 		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71,
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road	 		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road  Gloucester crescent			cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55 measles 2
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road  Gloucester crescent Great Western terra	ace		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55 measles 2 convulsions 2, pneumonic phthisis 27
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road  Gloucester crescent Great Western terra High street	ace		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55 measles 2 convulsions 2, pneumonic phthisis 27 bronchitis 69
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road  Gloucester crescent Great Western terra High street Julien terrace	ace		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55 measles 2 convulsions 2, pneumonic phthisis 27 bronchitis 69 paralysis 71, measles 1
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road  Gloucester crescent Great Western terra High street Julien terrace Lansdown terrace	 ace 		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55 measles 2 convulsions 2, pneumonic phthisis 27 bronchitis 69 paralysis 71, measles 1 dysentery 36
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road  Gloucester road  Gloucester terra Great Western terra High street Julien terrace Lansdown terrace Lansdown place	ace		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55 measles 2 convulsions 2, pneumonic phthisis 27 bronchitis 69 paralysis 71, measles 1 dysentery 36 hepatic abcess 31, cancer 55
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road  Gloucester road  Gloucester terra High street Julien terrace Lansdown terrace Lansdown place Lansdown crescent	 ace 		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55 measles 2 convulsions 2, pneumonic phthisis 27 bronchitis 69 paralysis 71, measles 1 dysentery 36 hepatic abcess 31, cancer 55 paraplegia 29, marasmus 78
Alstone Arle Bayshill road Bayshill terrace Christ Church terra Denmark terrace Douro road  Fauconberg villas Gloucester road  Gloucester road  Gloucester terra Great Western terra High street Julien terrace Lansdown terrace Lansdown place	ace		cerebral rheumatism 36 marasmus 1 measles 2, premature birth 1, 1 old age 79 heart disease 74, 15 old age 90 bronchitis 87 typhoid fever 43 dyspepsia 55, asphyxia 53, influenza 75, meningitis 12 convulsions 1 general anasarca 49, marasmus 1, old age 78, anæmia 15, pertussis 1, diarrhæa 71, erysipelas 62, cancer 55 measles 2 convulsions 2, pneumonic phthisis 27 bronchitis 69 paralysis 71, measles 1 dysentery 36 hepatic abcess 31, cancer 55

old age 82 Lansdown parade suicide by poison 44, old age 84, 74 Manchester street . . . bronchitis 78 Manchester square tubercular meningitis 2 Malvern View villas ... syphilis 50 Magdala cottages bronchitis 78 Malvern road old age 65 Millbrook street old age 88, cerebral embolism 44, phthisis 24 Queen's retreat old age 92, rheumatic fever 46 Queen's road... cancer 70 Queensland villas . . . old age 96, 85 St. George's road peritonitis 15, disease of gall bladder 74 St. George's square ... apoplexy 30 St. George's parade ... . . . old age 80, cerebral congestion 78 St. James' square heart disease 50 St. Mark's apoplexy 75 York terrace ...

#### CENTRAL WARD.

heart disease 79 Bennington street paralysis 75, apoplexy 61, gastritis 1, con-Brunswick street gestion of brain 38, measles 2, bronchitis 1 Brunswick terrace marasmus 1 congestion of lung 70 Beaufort buildings Beaufort place senile gangrene 90 . . . exhaustion 73, bronchitis 78, pneumonia 68, Clarence square hemiplegia 92, pleuro-pneumonia 85 cancer 69 Cleeve cottage Clune cottage... locomotor ataxy 57 Children's Hospital broncho-pneumonia 2, larnygitis 2 Courtenay street cerebral hemorrhage 48 Dunalley street phthisis 22, bronchitis 52 Grosvenor place heart disease 70 . . . Grosvenor street old age 81 pleurisy 55, measles 1, convulsions Gloucester place phthisis 27 High street ... pneumonia 56, cancer 75, enlarged prostate 74 Hanover street cerebral hemorrhage 81, bronchitis 72 Havod cottage diarrhœa 1 Juliansterrace old age 72 Knowsley parade bronco-pneumonia 2 Larput place ... tabes mesenterica 1, old age 85, pneumonic phthisis 28 Long's cottages measles 1, 2 Marle Hill road typhoid fever 45, premature birth 1, 1, . . . . . . umbilical hernia 59, heart disease 77, intestinal obstruction 19, osteo arthritis 64, cancer 78 Marle Hill villas emphysema 42 Marle Hill parade paralysis 71 . . . Mountpleasant chronic renal disease 30, heart disease 79 . . . Northfield terrace renal disease 70, heart disease 85 Monson terrace phthisis 52

heart disease 62

. . .

Normal terrace

North place	• • •	premature birth 1
Orchard place	• • •	nephritis 73, old age 71
Pittville street	• • •	Bright's disease 56, tubercular meningitis 6,
Dittrilla park laka		cancer 77, 62
Pittville park lake Portland street	• • •	found dead in water 49
roruand street	• • •	bronchitis 54, heart disease 75, 66, want of attention at birth 1
Providence place		heart disease 16
Pittville lawn	• • •	nephritis 88
Pittville villas	• • •	locomotor ataxy 69, gout 76
Portland place	• • •	old age 84
Portland terrace	• • •	meningitis 1
Prestbury road		tumores maligni 78, phthisis 56
Queen's buildings		cancer 60
Regent terrace	• • •	old age 80
Rose and Crown passage		gastro-enteritis 60, peritonitis 73, bronchitis
		71, want of attention at birth 1, heart
		disease 48
Rutland street	• • •	peritonitis 45, non-expansion of lungs 1, old
		age 85, 70, 81, measles 2, pneumonia 65
Regent place		phthisis 26
St. Paul's street, N		heart disease 74, bronchitis 72 phthisis 20
St. Paul's parade		measles 5, 7, hæmoptysis 37, old age 80
St. Margaret's terrace		spinal paralysis 78
St. George's street		tubercular meningitis 5, diarrhœa 1, typhoid fever 34
Sharbarna atreat		
Sherborne street	• • •	measles 2, accidentally suffocated 1 phthisis 30
Spackman's cottages Swindon road	• • •	teething 2
Sherborne place	• • •	child birth 25, heart disease 74, convulsions 2
Winchcomb street		anæmia 1, heart disease 63
Wood's court		old age 72
Westbourne terrace		old age 89, phthisis 21
Windsor street	• • •	phthisis 26, old age 77
Wellington grove		premature birth 1, paralysis 82
Wellington square		cancer 51
Victoria street, St. Paul's		hemiplegia 61, old age 77, measles 4
	79. 45	
	M.	IDDLE WARD.
Alexandra street		febricula 6
Albany road		paralysis 67, erysipelas 1
Brandon terrace		bronchitis 79
Clarence street		erysipelas 63, bronchitis 89, malignant
TS 1.		disease 77
Briton terrace	• • •	cancer 61
Cassino place	• • •	accidentally suffocated 1
Clarence terrace	• • •	hemiplegia 66
Clarence parade	• • •	phthisis 47 cancer 61
Dagmar villas	• •	old age 79
Dagmar terrace	• • •	measles 14
Fauconberg terrace	• • •	old age 84, injuries from accidental fall 55
Granley road Grafton road	• • •	pneumonia 2
Granon road	• • •	

			D: 1.12 - 3: 45
Gloucester road	• • •	• • •	Bright's disease 45
Hatherley road	• • •	• • •	phthisis 31, apoplexy 91, larnygitis 2
Hatherley street	• • •	• • •	apical pneumonia 50, phthisis 32, hemiplegia
TT (1)			74
Hatherley		• • •	heart disease 49
Hatherley place	• • •	• • •	diphtheria 68
Imperial square	• • •	• • •	old age 82, cancer 85, apoplexy 64
Lansdown cottages	• • •		measles 2, bronco-pneumonia 1, premature
, and the second			birth 1
Lypiatt street			atheroma 49
Park view			bronchitis 5
Montpellier parade	• • •	• • •	bronchitis 69
Moorend		• • •	cancer 61, bronchitis 71
Montpellier villas	• • •		pleuritic effusion 74, tuberculosis 12
Moorend street	• • •		measles 3, old age 83, debility 1, phthisis 43
Moorend villas	• • •		heart disease 32
Promenade	• • •		malignant disease 70, softening of brain 70
	•••	• • •	disease of peritonitis 65
Princes road	* * *		old age 78
Prospect place	• • •	• • •	old age 84
Park The		• • •	cancer 71, heart disease 61
Promenade villas	• • •	• • •	edema of lung and bronchi 57, pleurisy 19
Promenade terrace	• • •		Bright's disease 59
Painswick lawn	• • •	•••	pernicious anæmia 65, heart disease 71
Painswick road	• • •	• • •'	
Queen's circus	• • •	• • •	bronco pneumonia 84 induced labour 1
	• • •	• • •	
Redgrove cottages	• • •	• • •	shock, result of fall 80
Rodney terrace	• • •	• • •	congestion of lung 76, apoplexy 67, bronchitis
Parent street			82, 76, convulsions 2, Bright's disease 58
Regent street	• • •	• • •	premature birth 1, cancer 61, heart disease
Paglym villag			63, tuberculosis 14
Roslyn villas	• • •	• • •	anæmia 6
Royal parade	• • •	• • •	cancer 56
St. Mark's place	• • •	• • •	cancer 49
St. Phillip's street	• • •	• • •	bronchitis 77, 78, cystitis 67, inflammation
C1			of lung 1, emphysema 79
Spa place	• • •	• • •	measles 2
Suffolk square	• • •	• • •	hepatic cirrhosis 90
Short street	• • •	• • •	paraplegia 85
St. George's place	• • •	• •	bronchitis 1, malformation of heart 2
St. Stephen's road	• • •	• • •	cerebral paralysis 59
Shamrock villas	• • •	• • •	phthisis 37
Spa buildings	• • •	• • •	old age 93
St. George's parade	• • •		heart disease 60
Tivoli	• • •		icterus 1, bronchitis 72, pneumonia 62
Tivoli road			paralysis 72, cerebral hemorrhage 77
Tivoli street	• • •		cancer 46
Tivoli terrace	• • •	• • •	bronchitis 1, convulsions 2
Trafalgar street	• • •		feecal abcess 42
Tivoli place	• • •		heart disease 67
Tivoli Înn cottages	• • •	• • •	bronchitis 31
Upper Norwood stre			asthma 69, bronco pneumonia 1, 1
Gordon villa	• • •		cancer 46
Monogram house	• • •	• • •	blood poisoning 1
			•

#### ZYMOTIC DISEASES IN 1896.

In the following table the numbers of cases of Infectious Diseases notified in each quarter of the year are set forth:—

CASES OF INFECTIOUS DISEASES NOTIFIED DURING 1896.								
Disease.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.			
Scarlet Fever Enteric Fever Puerperal Fever Diphtheria Small Pox	29 9 1 14 14	17 4  14 7	30 6  13 1	50 7 3 19	$ \begin{array}{c} 126 \\ 26 \\ 4 \\ 60 \\ 22 \end{array} $			
Total from all	Total from all Diseases notified 238							

#### SCARLET FEVER.

There was a revival of this disease, particularly in the last quarter of the year, in our district; and, curiously, whereas when Scarlet Fever was epidemic here in 1893 there were but few cases in the surrounding villages, the case was reversed last year, when the surrounding rural districts suffered severely, and we had evidence of the introduction of the disease from the adjoining parishes into the Borough. There were severe epidemics of Scarlet Fever last year in Birmingham and Leicester, and a great prevalence at Bristol and other towns, and in several instances Scarlet Fever was introduced here from one or other of The disease, as it affected the town, was of a these places. very mild type, the chief sign of children being affected being oftentimes the after desquamation of the epidermis simply. The fact of the symptoms having been so mild led, of course, to the neglect of the patients, and the consequent spread of the complaint. It is probable that improved sanitary conditions have been the cause of a diminution in the number of those serious anginose cases with which we used to be familiar. It is a matter for congratulation at least that there was no death, either in the Hospital or outside it, amongst the 126 cases of Scarlet Fever last year notified.

#### ENTERIC FEVER.

There was a comparatively slight incidence of this disease last year, only 26 cases being notified. There were nine deaths certified, however, giving a case death-rate of 34 per cent.

#### PUERPERAL FEVER.

The four notified cases were attended by midwives, and there was evidence of one midwife having conveyed infection to several women who all developed symptoms of septicæmia, though they were not all notified as "puerperal fever." The midwives connected with the above cases were prevented going to other cases for a month; their clothing, etc. was disinfected, and advice given to them as to personal cleanliness and the use of disinfectants.

#### DIPHTHERIA.

Last year will have to be considered a diphtheria year, inasmuch as this disease was of wide spread and increased occurrence in most districts. In some, where it had previously been comparatively rarely notified, it became quite prevalent, and although it was not so bad as this in our own district, we have no record of so many as 60 cases with 13 deaths having occurred in any one year before. The causes which lead to a prevalence of this disease are still unravelled; practically all that is yet known on this score is that, hitherto, it has been to a greater extent incidental to some parts of the country than to others; the county of Essex for instance, being a quarter notoriously badly affected by it. Judging from past statistics, Cheltenham is not a district particularly affected by Diphtheria. Of the 13 deaths we had from Diphtheria last year 12 were in children under 5 years of age.

#### INFLUENZA.

This occasioned only 2 deaths last year, as against 28 in the year before. It is to be hoped that this lessening in the number of cases means that Influenza is about to leave us again for a long period.

#### SMALL POX.

During the time the epidemic was taking place at Gloucester, which is 8 miles by road from Cheltenham and a rather shorter distance by rail, we had 23 cases removed to hospital. 20 of these were undoubted cases of Small Pox, and 3 were so doubtful as to require to be isolated from the other patients, 2 of them were probably Chicken Pox, and the third may have been Small Pox modified by vaccination. Several of the patients had somewhat severe attacks, but we have no death to record The visitation as it affected Chelfrom this disease. tenham was therefore quite trivial as compared with what occurred at Gloucester, where there were over 2,000 cases and more than 400 deaths. At Gloucester, vaccination having fallen into disrepute, there was a large population unprotected by this means against Small Pox, and the disease consequently spread rapidly, and quickly beyond the possibility of isolation in the hospital provided there. The few cases we had here were easily controlled, and the spread of the disease prevented from the first by instant removal of every case to hospital, and by the after daily watching of those persons who had been in contact with the patients. Six cases arose in the persons being thus watched, and were removed to hospital before they had time to give off much infection, for it is generally recognised that comparatively little infection attaches to the first symptoms of small pox. A certain amount of money was given in compensation to wage earners for remaining away from their work in order to be under more easy observation, but in cases where there has not been very close contact with the patient, and where disinfection of clothing has been very thorough, it is unnecessary to keep people cooped up for two or 3 weeks in houses, provided they are examined by the Medical Officer of Health every day during the time of their liability. All the rooms in which small pox occurred were stripped, fumigated, cleansed, limewashed and re-papered, and the bedding and clothing taken to the steam disinfector or burnt. Now we have steam disinfectors there is no occasion to destroy any bedding or clothing that has any value, but in the poorest houses the bedding and much of the clothing cannot be said to have any value, and is so filthy that when found, whether

in connection with Small Pox or any other infectious disease, it is a sanitary measure and a mercy to burn it, and have it replaced by something decent.

The following is a brief summary of the points of interest in the cases of Small Pox which occurred here:—

- I.—Age 18.—This was a domestic servant in an important establishment. She visited friends in Gloucester 12 days before onset of first symptoms. A decided case. She was vaccinated in infancy.
- II.—Age 36.—This was a cook in a large house. She visited friends in Gloucester 12 days before onset of first symptoms. The case was considered a much modified one. She was vaccinated in infancy.
- III.—Age 32.—An artizan's wife. Lived next door to a woman who had recently returned from Gloucester, and had herself suffered an illness, probably Small Pox, and who was constantly in and out of her house. Her's was a severe case. Vaccinated in infancy.
- IV.—Age 19.—A young man, son of the woman mentioned in connection with last case. He had a decided but mild attack. Vaccinated in infancy.
- V.—Age 18.—A young woman, sweetheart of last case, who was under observation as one of those who had been in contact with him. A very mild case. Vaccinated in infancy.
- VI.—Age 32.—Wife and mother of family. They all came from Gloucester where they had been living next door to where cases of Small Pox had occurred, and they left Gloucester on this account 12 days before onset of her symptoms. A marked case. She was vaccinated in infancy.
- VII.—Age 20.—A domestic servant in a lodging house. People from Gloucester had visited the house one week previously, and no more definite history of exposure to infection could be obtained. Mild and somewhat modified case. Vaccinated in infancy.

- VIII., IX., X.—Ages 36, 10, 6.—The husband and two children of No. VI. They were isolated and under observation. The father and one child were removed to hospital 9 days after removal of mother. The second child was removed on the thirteenth day after removal of mother. There were four children in this family, two had been vaccinated and two had never been vaccinated. The vaccinated and unvaccinated were alternate in age. The two who had not been vaccinated were the two who got the Small Pox. The father said he thought he had been vaccinated, but no marks were seen.
- XI.—Age 33.—Domestic servant. She went to visit her sister at Gloucester, and during her stay there a child was removed from the house to the Small Pox hospital where it died. She attended the funeral. She was notified as a case of Small Pox on the 13th day after her return from Gloucester. A mild attack. Vaccinated in infancy.
- XII.—Age 14.—This was a schoolboy and was one of the doubtful cases. Medical opinion was divided between modified Small Pox and severe Chicken Pox. He had a ward to himself, and a fortnight afterwards when growing convalescent from his first complaint he got an attack of measles. Vaccinated in infancy.
- XIII.—Age 22.—A working man. 17 days before appearance of rash had spent 3½ days at Gloucester assisting in erecting Small Pox hospital there. A mild attack. Vaccinated in infancy.
- XIV.—Age 16.—Domestic servant. She came from Gloucester into service at Cheltenham 10 days before falling ill. A mild attack. Vaccinated in infancy.
- XV.—Age 12.—There was no history of connection with Gloucester so far as could be ascertained. The father hawked sand about the country. Rash thick but not dangerous. Said to have been vaccinated in infancy.
- XVI.—Age 7.—Sister to last case. Was under daily observation and promptly removed at commencement of symptoms which occurred 11 days after removal of her sister. Marked case, never previously vaccinated. There were 4 other children, two vaccinated and two not.

XVII.—Age 18.—This young woman was one of the doubtful cases, the doubt lying between modified Small Pox and severe chicken pox. She had been vaccinated in infancy.

XVIII.—Age 33.—A carpenter. He had been working on the new infectious diseases hospitals at Gloucester, and came home at the week-end. The case reported on a Sunday he having come home from Gloucester the previous day. Discrete case. Vaccinated in infancy.

XIX.—Age 22.—Domestic servant. No evidence of direct infection from Gloucester could be obtained. A moderately severe case, said to have been vaccinated in infancy.

XX.—Age 24.—Butcher's assistant. Gloucester drovers had brought over cattle to the slaughter-house where he worked, and he had relations at Gloucester. At the Bank Holiday 14 days before onset of symptoms he had gone to Birmingham in a crowded excursion train. A mild attack. Vaccinated in infancy.

XXI.—Age 32.—Wife of working man. Had been to Gloucester 5 weeks before, and husband's brother lived in Gloucester and had visited them several times during the last 5 weeks. There was a death in the family at Gloucester a fortnight previous to her case being notified, the death being said to be due to measles, but the case described as one in which the rash did not come out well, and the skin turned purple. Drain passing under house found very defective. Not a severe case. Vaccinated.

XXII.—AGE 24.—Single woman in contact with last case and under daily observation. She belonged to an antivaccinist family and had never been vaccinated. Severe attack.

XXIII.—Age 1 Year.—This case occurred in a close and thickly populated passage. The parents declined to allow of its removal to hospital, but the case was forcibly removed upon a magistrate's order. Rag sorting was done in the yard. Father had been staying at Gloucester until a few days before. The child was not vaccinated.

#### MEASLES.

The severe epidemic of measles which visited us in the first months of the year was the subject for the special report which is reprinted below. The notification of measles as recommended by me in this report, was unanimously recommended by the Public Health Committee, but was rejected by the Council at a meeting held in holiday time, when there was a very small attendance of members. I am still of opinion that in a town like Cheltenham, the reputation of which in great part depends upon its colleges and schools, the notification of measles is advisable. It would do no possible harm, and the cost of it is the only logical objection that can be urged against it. This cost as I have shown in the report, taken one year with another, is not likely to amount to a large sum. Without notification the Medical Officer of Health is crippled in his endeavours to prevent the spread of measles by want of knowledge of the existence of cases.

A Special Report on an Epidemic of Measles which occurred in Cheltenham at the End of 1895, and in the first Months of 1896.

It is improbable that a town of the size of Cheltenham ever gets through a single year without its cases of Measles. If the infection of this disease does ever exhaust itself and die out, it is so easily introduced again from the outside, being constantly prevalent in one place or another, as to render it almost hopeless to prevent its recurrence within a short space of time.

The tendency Measles shows to occur in periodical epidemics is very marked, and results in great part from the fact that an attack protects the body against a further attack, and an interval is required between the epidemic waves for new material to spring up. Thus it happens in every epidemic that the major portion of cases occur in the infantile part of the community. As in the case of Small Pox and Cow Pox

however, the rule of one attack protecting from a further attack is not absolute, exceptions occur, and cases of people having Measles several times within a few years have been known. That other causes, such as special meteorological conditions, may have an effect in determining the cycles of this and other epidemic diseases is quite conceivable, such possible causes are however at the present time exceedingly indefinite and ill understood. Again it is highly probable judging from analogy that Measles owes its infectiousness to a living micro-organism. So far however this matter has not been satisfactorily cleared up, and as to whether the infection has a power of multiplication outside the body, by saprophytic growth upon refuse and filthy matter, etc., is also an obscure point.

In England at the present time Measles is more universal in its incidence than either of the other zymotic diseases, and as it is recognised to be so common a complaint that most people have it sooner or later, it has come to be looked upon by the public with equanimity, and on the part of some there is a feeling that it is well to have it early and get it over. This is a fatal mistake which has, or ought to have, received its correction by experience, and by the statistics published relating to deaths from Measles and the age at which death occurs. Taken through a series of years Measles is the cause of more deaths in this town than either of the other eruptive fevers, and during the last twenty years, without counting the numerous deaths of the recent epidemic, the deaths from Measles have about equalled those from Scarlet Fever, Diphtheria and Whooping Cough combined.

A very large percentage of the deaths occur in children under 5 years of age, and deaths at an age exceeding 10 years are rare. Adults and adolescents, especially those who have never before contracted the disease are attacked not infrequently, but for any person of such age, who has been previously healthy, to die of Meales is a thing practically unheard of. The danger in fact diminishes as age increases and if children could be prevented getting the Measles in their earlier years the death-rate from this cause would undoubtedly be very greatly reduced. Deaths from Measles are most often brought about by an inflammation of the lungs and respiratory passages to which Measles patients are particularly prone. The contemptuous complacency with which this "simple child's disorder" is viewed

by the parents is too apt to receive a sudden shock when, the symptoms having become urgent, a doctor is at length sent for, who comes to find the child in a dying condition. Nearly all the deaths occur in poor-class houses, which says much for the ill effects of neglect and the life-saving influence of care and attention.

The last epidemic of Measles prior to that of the present year was in 1892. Referring to my Annual Report for that year I find there were 41 deaths from Measles in the year and that all of these occurred in houses whose annual value was under £18 a year. In the recent epidemic the same thing may be noticed. Notwithstanding the ubiquity of the complaint the whole of the deaths occurred in small houses, occupied chiefly by members of the labouring class. There were many hundreds of cases in the better class houses but not one died.

Owing to the fact that Measles is not one of the diseases requiring to be notified by the Cheltenham Improvement Act, 1889, no means exist of estimating the exact numbers affected in the recent epidemic. All the busy Medical Practitioners of this town attended a large number Few, however, appear now able to state how many, or where they severally occurred. The statements I have obtained from the Medical Practitioners, Schoolmasters, Schoolmanagers, and from other sources are however sufficient to show that the epidemic beginning chiefly in one locality spread in the course of three or four months to every district in the town, and it is probable that there were cases in almost every street. All the surrounding villages were also affected. Undoubtedly a large number of children had the disease and recovered without any Medical attendance, and many of these cases would be known only to the parents and guardians and possibly their more immediate neighbours. No medical certificate was given for one of the deaths, the child dying before medical advice was sought.

I first became aware of the prevalence of Measles in connection with a large private elementary day school in St. John's Parish which is situated in the east centre of the town. This was about a fortnight before Christmas. I learned on enquiry that in the week beginning Dec. 9th all the children were present on Monday and Tuesday, and before the end of the week out of 30 forming a class of the youngest children, 18 were absent ill, most of them reported

as having Measles. At the end of this week the school broke up, a week earlier than usual, for the Christmas Holidays. The Schoolmaster states that at the end of a three weeks' holiday all the children returned well, and he believes 29 in all of the children of his school had Measles. Within 200 or 300 yards of this School are the Church Schools of St. John's, Holy Trinity and All Saints', those of St. John's being very close at hand. The falling off in attendance of the lesser children in these schools before the Christmas holidays was not very marked. After the extended holidays (the holidays were extended a week upon my advice) the St. John's school children came back in fairly full force and the attendances were sustained through the following quarter. There was an increase of cases however after the holidays in All Saints and Holy Trinity Schools, which necessitated the closing of their Infants' Departments.

There is no doubt that it was in the St. John's locality that the epidemic commenced, and chiefly in connection with the private school before mentioned. From this focus it extended, and it was not long before the poor and thickly populated districts of St. Paul's, St. Peter's and St. Luke's became affected. The very poor class district of Fairview in the All Saints neighbourhood having also a severe and prolonged visitation. By March the disease had spread itself over the whole town, and many of the better class houses in the fashionable districts of Pittville, Bayshill and Lansdown were invaded. There were a good many cases amongst the pupils of the Boys' and Ladies' Colleges, both amongst those who lived with their parents at home and those who resided in the College Boarding Houses, and there were about 40 cases in Dean Close School. These occurred chiefly in February and March. The type of the disease in these good class houses appears to have been benign, and the care taken of the patients good as there was not one death.

In connection with the General Hospital at Cheltenham, there are two Dispensary Districts which practically include the whole of the town. There is a separate Medical Officer for each District, one doing his work from the General Hospital, and the other from a Branch Dispensary. I have obtained complete returns from these two gentlemen, Drs. Davies and Tickell, showing the age and sex of their Measles patients, and the street in which each case occurred,

with dates. These returns give some good information of the course of the disease in the poor streets, and from them a case death-rate is obtained which gives a fair idea of the effects of the epidemic amongst the poorer part of the

community.

The first case in this Dispensary Practice was attended on November 8th, and the last on April 24st, and in all 476 cases were attended. Dr. Davies who attended the larger half, told me that prior to last November he had not seen a case of Measles for two years. From November 8th to December 12th the cases, 32 in number, were confined to the neighbourhood of St. John's.

The epidemic appears to have reached its climax about the first week in March, and at the end of March it collapsed suddenly. The new cases attended in each month

by the two Dispensary Doctors were as follows:—

Month	) <b>.</b>	(	Cases.		D	eaths.
November			17	• • •		0
December			65			1
January			105			4
February			155	• • •		10
March			128			8
April			6	• • •	• • •	<b>2</b>
						—
	TOTALS		476			25

The case death-rate upon these 476 cases is 5.25 per cent. The death-rate is the highest for males. There being attended 245 males with 18 deaths. 231 females with 7 deaths. The above attendances were all of poor class

patients.

The death returns for the whole Borough show that from the beginning to the end of the epidemic there were 49 deaths from Measles, which amounts to a death-rate per 1,000 persons living of 1 per 1,000. Of this total of 49 deaths, 29 were males and 20 females. The relative number of males to females of those 24 deaths that did not occur in the practice of the Dispensary Doctors being nearly equal.

Supposing the same death-rate held for these other 24 deaths, the total number of poor class patients that gave

the total of 49 deaths would be 933.

For some sort of estimate to be made of the total number of cases that occurred in the town there must be added to 933 a conjectural number, say half as many, of cases occurring in the higher-class houses which had no deaths. This in round figures would amount to 1,400. I believe there were fully 1,400 cases in our population of 49,000.

The following is a list of the 49 deaths, showing the occupation of the parents, etc., the locality of the houses,

and the age at which death occurred.

Rutland Street

#### Street. Occupation of Parent, etc. Age.Basket Maker Hewlett Street 2 years St. James Street Bird Dealer 14 months Grosvenor Terrace ... 8 months Joiner 16 months Labourer Leighton Road York Street Do. 3 years . . . Burton Street Do. 6 months . . . Denmark Villas Gardener 1 year . . . Milsom Street Tailor 30 years Long's Cottages Labourer 15 days Fairview Street 9 years Do. . . . St. Paul's Road 7 years Yardsman St. Paul's Road Do. 5 years . . . New Street Gardener 3 years All Saints' Terrace... Dressmaker 5 years Fairview ... Laundress 13 months Victoria Street, St. Paul's Labourer 4 years . . . Long's Cottages Do. 14 months Francis Terrace 2 years Laundress Carlton Place Labourer 10 months Marlborough Place... Engine Driver 3 years Queen Street 13 months Labourer Julian Terrace Ostler 10 months . . . York Street Labourer 15 months Carlton Place Plasterer 2 years . . . Nailsworth Terrace... Labourer 20 months Grove Street Hawker 2 years York Street Labourer 3 years York Street 2 years Dyer Brunswick Street ... 2 years Porter Tewkesbury Road ... 2 years Labourer Exmouth Court 6 months Charwoman The Workhouse Painter 8 years . . . 13 months Confectioner Spa Place Labourer Lansdown Cottages 2 years . . . Sherborne Street ... 18 months Engine Driver

... 17 months

Sweep

. . .

Street.	Age.	Occupation of Parent, etc.
Gloucester Crescent Duke Street Hereford Place Alstone Worcester Street Tewkesbury Road Malvern Street Stanhope Street Green's Place Nailsworth Terrace	Age.  22 months 2 years 9 months 11 months 3 months 15 months 3 years 1 year 11 months 2 years	Occupation of Parent, etc.          Labourer          Do.          Do.          Do.          Do.          Do.          Do.          Do.          Tailor
Arle Victoria Place, Bath Road Moorend Street	13 months 3 years 3 years	Carpenter Porter Signalman

The secondary causes of death were chiefly pneumonia, broncho-pneumonia, bronchitis and laryngitis, and are tabulated below:—

Disease of lungs and respin	catory	passages	• • •	39 cases.
Convulsions	• • •	•••	• • •	3 ,,
Otitis and Meningitis		• • •	• • •	1 ,,
Cellulitis			• • •	1 ,,
Debility		• • •	• • •	1 ,,
No secondary cause given	• • •			4 ,,

The action I took in connection with the schools, by virtue of power delegated to me, I reported to you at the There is no doubt whatever that the schools afforded an easy means for the spread of the malady. At Christmas, when I gathered in a somewhat indefinite way from Medical friends that Measles was very prevalent, particularly in St. John's District, I wrote a letter to the Managers of every Public Elementary School in the town advising that the holidays should be extended for one week. The managers made compliance with one exception, namely that of St. Mark's, which is a district on the edge of the town furthest removed from where the epidemic had its origin. Vicar stated that there was no Measles in his Parish at that time. At a later date St. Mark's suffered severely in common with all the other districts, and its Infant School was one of those afterwards closed. My knowledge of the progress of the epidemic was too meagre to warrant the further extension of the holidays, and on Jan. 9th I wrote to the School Managers as follows:—

"DEAR SIR,

Regarding the epidemic of Measles: so far as I have been able to ascertain, it is considerably abated, though cases still exist. Will you please instruct your Schoolmaster and Schoolmistress to enquire of each scholar whether there be Measles in his or her home, and wherever it be discovered that Measles exists, or has within the last few days existed, to refuse admittance to them to school until the sufferers in the house have recovered. With this proviso I advise the schools to be re-opened on Monday. If a list of the children be furnished me, which were thus excluded, I will give a certificate to the effect that they were unable to attend by reason of my advice.

Yours faithfully, (Signed) J. H. GARRETT.

HEALTH DEPARTMENT,
MUNICIPAL, OFFICES,
CHELTENHAM, JAN. 9th, 1896."

On February 17th, I sent the following circular letter to the Schoolmasters of all the Public Elementary Schools in the town, it being evident that Measles was still prevalent:

"DEAR SIR,

The careful observance of the bodily condition of all school children being particularly desirable at the present time, I may direct your attention to the following extract from the Memorandum of the Local Government Board, as to the aid which Schoolmasters and others can give in preventing the spread of Epidemic Diseases in Schools:—

'The attention of School Attendance Officers and of Schoolmasters should be drawn to the following considerations:—Frequently, they themselves, will obtain the earliest information of the occurrence of Infectious Disease among Scholars, and it is most desirable that such Officer or Master should without delay communicate the facts to the Medical Officer Absence of any child from school on the plea that it is suffering under one of the before-mentioned diseases (i.e., all the dangerous Infectious Diseases), and absence of several children from one family from school at the same time, no matter what name be given to the complaint that keeps them at home, should be reported to the Health Officer. In practice it has been found that this notification of absentees has materially aided the Local Health Officer in taking measures for the suppression of Infectious Disease, to the advantage alike of the District and of the School. Furthermore, Schoolmasters may properly be asked to take note, especially when an epidemic threatens, or is present, of symptoms occurring in any of their scholars that may indicate the commencement of disease febrile in nature. Besides Heat of Skin, such symptoms are Shivering, Headache and Langour, (especially if commencing suddenly), Vomiting, Rashes on the Skin and Sore Throat. When Scarlet Fever or Diphtheria is about, every trace of Sore Throat should be looked upon as suspicious. In any case where such symptoms are observed, the safest course will be to exclude the child from school until assurance can be had that it may attend school without harm to itself or danger to other scholars.'

Yours	faithfully,	
(Signed)	J. H. GARRETT,	
,	Medical Offi	icer of Health."
$T_0$	J.	v

The result of the extra week's holiday at Christmas appeared beneficial so far as St. John's School and the neighbouring Private School were concerned, their attendances being good after the holidays.

The following is a list of the other schools closed with dates of the advisory letters written by me to the Managers, the term for which the school was advised to be closed being three weeks in each case:—

> St. Philip's January 30th. All Saints' February 6th. Trinity 6th. St. Mark's 24th. Christ Church 24th. St. Peter's March 3rd. St. James's 9th.

Before being re-opened the several schools were well

fumigated and ordered to be thoroughly cleansed.

It was the Infants' Department only that was closed excepting in the case of St. Mark's where the advice included the Girls' school. With the exception of the older children who were staying away by my advice on account of the illness of their younger brothers and sisters, there were few absentees from Measles in the Upper Schools, most of the older boys and girls having no doubt had Measles at some time previously. In such a case it does not occur to me to be advisable to put a stop to the teaching in the whole of the school. I am informed, however, that the Education Department will only allow an average attendance to be counted where the whole school is closed, and this causes some of the Schoolmasters and Managers to prefer the whole of the school to be closed, to avoid any danger of losing their grant by a deficient attendance. Allowance should however, be made for those absentees who stay away on account of their relatives' illness. I may mention in this connection that in every case of notified Infectious Disease in Cheltenham, a formal notice is sent both to the Schoolmaster and to the Parents forbidding any child to go to school from the infected house within a given stated time.

The Epidemic of Measles now some time past, was concurrent so far as it went with a most severe epidemic of Small Pox at Gloucester 8 miles distant. There is nothing however to show that the two diseases had any connection with each other, either in respect to their causation or otherwise.

A careful comparison of the chief dates of incidence of the Measles so far as we have them, and deaths therefrom, and the Meteorology of the same periods reveals nothing of interest as suggesting a cause or an aggravation of the disease in the changes of temperature, air pressure, and direction of wind.

The notification of Measles is particularly desirable in Cheltenham, the main interests of the town being centred in its Educational Establishments. There is a constant influx of young persons from without, besides those that are born in the town, and from several points of view it is essential that these should be protected by all available means against these recurring Epidemics of Measles. Measles being also responsible for a large portion of our Zymotic death-rate, it behoves us further to make some effort, possibly by Hospital treatment, to save some of these young lives that are at present lost in great part through neglect.

Without notification very little can be done even in the way of effectively preventing children going to school when they or their immediate relations are in an infectious

state.

I most strongly advise therefore, that permission be immediately sought from the Local Government Board to add Measles to the list of Diseases required to be notified by the Cheltenham Improvement Act, 1889.

I am, Gentlemen,

Your obedient servant,

J. H. GARRETT,

Medical Officer of Health.

To the Sanitary Authority of the Borough of Cheltenham.

June 24th, 1896.

#### ADDENDA.

The information which led to the closing of the schools was received from the Schoolmasters and Schoolmanagers when a large portion of the scholars were already absent suffering from Measles, and the information as to the locality and spread of the Epidemic was for the greater part obtained after the event.

It would be of little or no use to rely upon any partial or voluntary notification of Measles by the Schoolmasters and Medical men. I believe the only practical mode is by adding Measles to the list of diseases to be notified, and

paying the usual fee to the Medical men notifying.

It is impossible to say to what extent action could be taken with a view of saving life and preventing the spread of Measles, until a chance has been obtained of more closely studying the matter after notification has been adopted. As in the case of other infectious diseases however, better isolation and disinfection would be practised, and advice as to the seriousness of the complaint would be given. The mere fact of requiring the disease to be notified would suffice to impress the public with the importance that properly attaches to Measles, and tend to prevent the carelessness with which cases are now treated.

The Parents themselves as well as the Doctors are responsible for notification. The chief object of this is of course to cover those cases where no doctor is in attendance. In Cheltenham however, there is no great difficulty in obtaining gratuitious medical attendance, especially in those cases where a fee is given from the public purse for notification. Ignorance of the nature of the disease would therefore be a poor plea, as in the case of the in many respects similar disease, Scarlet Fever, which is subject to all the pains and penalties of the Notification Act.

I know of no reason why Scarlet Fever should be notified any more than Measles, the latter is as infectious and

dangerous as the former.

The cost of the notification of Measles should not of itself be a reason for its non-adoption. The annual expenditure, so far as notification fees are concerned might perhaps average £30 to £50. I suppose the residents of Cheltenham would be agreeable to subscribe such a small sum simply to keep Measles patients and their more immediate relations out of the schools.

The following table shows the number of deaths from the seven chief Zymotic diseases during the last 20 years. It will be noticed that excepting Diarrhæa, which is a much more vague and inclusive cause of death than either of the other six, Measles heads the list. 1896 will be another Epidemic year for Measles:—

TABLE SHOWING DEATHS FROM THE SEVERAL INFECTIOUS DISEASES IN CHELTENHAM DURING TWENTY YEARS.

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TOTAL	Oyo	268	148	131	71	57	Н	
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,80		44 <b>6</b>	70	$\vdash$		ಣ	•	
.79		1 0	•	70	Н	62	:	
,78		87 87	•	$\infty$	<del></del>	63	•	
22,		12	16	$\infty$	10	23	•	
1876		44 30	<b>0.</b>	10		4	•	
		Diarrhœa Measles	Scarlet Fever	Enteric Fever	Whooping }	Diphtheria	Small Pox	

In the Registrar General's Returns for All England Measles occupies the same high place amongst the Zymotic diseases causing death, when a series of years is taken. Deaths from Measles, however, are not so relatively out of proportion to deaths from Whooping Cough and Diphtheria as is shown by the above table to be the case in this Borough. Relatively to other places we appear to get comparatively little Whooping Cough here.

## INFECTIOUS DISEASES NOTIFIED IN CHELTENHAM SINCE NOTIFICATION BEGAN IN 1890.

Year.	Scarlet Fever.	Enteric Fever.	Diphtheria.	Puerperal Fever.	Small Pox.
1890 1891 1892 1893 1894 1895 1896	93 75 264 419 147 89 126	24 19 10 63 27 34 26	16 15 10 33 26 25 60	2  4 1 3 4	 2 3 1 22



	OSPITALS.	Total Cases in each Ward.	56	28	ස	48	28	28	<u></u>	9	4
	REATED IN H	Puerperal Fever.		:	:	2	:	•	•	1	:
IN 1896.	E NUMBERS T	Enteric Fever.	6	4	<b>C</b> 3	70	<del></del> 1	ಣ	67	•	•
S NOTIFIED IN 1896.	SHOWING TH	Diphtheria.	10	4	17		$\infty$	12	63	:	•
INFECTIOUS DISEASES	UTIONS AND	Scarlet Fever.	28	19	12	30	17	$\infty$	ಣ	تن	4
INFECTIO	S AND INSTIT	Small Pox.	$\infty$	П	2	4	67	ro	•	•	:
	VARDS		•	•	•	*	•	•	• • •	•	*
	IN		:	•	:	•	•	•	:	•	:
	DISTRIBUTED IN WARDS AND INSTITUTIONS AND SHOWING THE NUMBERS TREATED IN HOSPITALS.	Ward.	North Ward	Central Ward	East Ward	South Ward	Middle Ward	West Ward	General Hospital	Workhouse	Children's Hospital

The 11 cases of Diphtheria, All the Small Pox and Scarlet Fever and 1 Enteric case went to the Delancey Fever Hospital. The 11 cases of Diphti the other 7 cases of Enteric, and the 3 Puerperal cases were treated in the General Hospital or the Union Infirmary.

Totals in whole of Borough ...

 $\infty$ 

Numbers treated in Hospitals in 1896

#### UNCERTIFIED DEATHS IN 1896.

There were eight deaths last year for which no medical certificate was given, and in which no inquest was held. The causes assigned for them by the Registrar was as follows:—

Apoplexy, at age 75	• • •	•••	• • •	1
Bronchitis, at ages of 73, 84	• • •	• • •		2
Heart Disease, at ages of 62, 79	• • •	• • •	• • •	2
Measles and Bronchitis, at age of	6 months	• • •		1
Deaths within an hour of Birth	• • •	• • •	• • •	2
				8

#### RESULT OF CORONER'S INQUESTS, 1896.

Forty-seven deaths were reported as having been certified by the Coroner after an inquest.

Accident, vaulting horse fell on her	• • •	• • •		1
" horse fell on him	• • •	• • •		1
,, by falls	• • •	• • •		3
,, by poison	• • •	•••		2
,, by explosion of coal gas	• • •	• • •		1
Anæmia in young children	• • •	• • •	• • •	2
Apoplexy, cerebral hemorrhage	• • •	•••	• • •	2
Asphyxia	• • •	• • •		1
,, (Accidental Suffocation: O	verlain ?)		• • •	5
Birth, want of attention or weakness	at, etc.	^ • •		5
Brain Congestion	• • •	• • •		1
Convulsions	• • •	• • •		1
Croup	• • •	• • •	• • •	1
Heart Disease		• • •		12
Indefinite, "found dead," "natural ca	auses ''	• • •		2
Old Age	•••	• • •		1
Pneumonia, Inflammation of Lungs	• • •	• • •		2
Suicide, by poison 2, by hanging 1	•••	• • •	• • •	3
Tetanus, result of gunshot wound	• • •	• • •		1
				47

Table of DEATHS during the Year 1896, in the Cheltenham Urban District, classified according to Diseases, Ages and Localities.

10   10   10   10   10   10   10   10
10   21   22   346   5   5   5   5   5   5   5   5   5
10   21   7
10 causes at   2 causes
10 causes at   2 causes
1   1   1   2   2   2   2   2   2   2
10   21   22   346   Conder 5   2   3   4   4   Conder 5   3   4   4   5   5   Conging of the above Records of Morein and a powerds of 5   3   3   3   3   3   3   3   3   3
10   21   22   346   Under 5   23   46   Under 5   24   Cough   24   Cough   25   25   25   25   25   25   25   2
Single of the above Records
Causes at a special cause at a specia
Causes at a special cause at a specia
Causes at a special cause at a specia
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Continued ages at a see and ages at a see and under 55 and under 55 and under 55 and under 55 and under 56 and under 56 and under 56 and under 57
Sand under 5   Sand under 5   Sand under 5   Sand under 65     (a)   (b)   (c)   (c)   (d)   (d)     (b)   (c)   (d)   (d)   (d)   (d)     (c)   (d)   (d)   (d)   (d)   (d)     (c)   (d)   (d)   (d)   (d)   (d)   (d)   (d)     (c)   (d)
Sand under 5   Sand under 5   Sand under 5   Sand under 65     (a)   (b)   (c)   (c)   (d)   (d)     (b)   (c)   (d)   (d)   (d)   (d)     (c)   (d)   (d)   (d)   (d)   (d)     (c)   (d)   (d)   (d)   (d)   (d)   (d)   (d)     (c)   (d)
Sand under 5   Sand under 5   Sand under 5   Sand under 65     (a)   (b)   (c)   (c)   (d)   (d)     (b)   (c)   (d)   (d)   (d)   (d)     (c)   (d)   (d)   (d)   (d)   (d)     (c)   (d)   (d)   (d)   (d)   (d)   (d)   (d)     (c)   (d)
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all causes at ages  all causes at  (F) (G) (H) (I)  (I) (G) (H)  (I) (G) (H
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Names of Localities pted for the purpose ese Statistics; public tutions being shown eparate localities.    A   (A)     A     Careth House   Idren's Hospital     Total among perselution and perselution within bistrict among perselution occurring within District among perselution belonging the perselution of the perselution of the point of the point of the properties among perselution of the point of the perselution of the perseluti
Tor
Names of Localities adopted for the purpose of these Statistics; public institutions being shown as separate localities.  Cheltenham  Workhouse  Workhouse  Totals Hospital  Workhouse  Totals eventing outside the District among persons belonging thereto. Deaths occurring within the District among persons belonging within the District among persons not belonging ing
S E D C C C E E E E E E E E E E E E E E E

# Cheltenham Urban Sanitary District

OAUSES DURING THE LEAR LOAN LOAD.  ACES.  ACES.  ACES.  ACES.  10 1 6 15 25 35 45 55 65 75 and 10 10 10 10 10 10 10 10 10 10 10 10 10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1     8     1     1     8     1 <th>1</th> <th>20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</th>	1	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Cheltenham Urban District, classified according to Diseases, Ages, and Localities. (B) Table of

n their treat-	ers.	Риегрегаl	:0	: :	• •	:	:	en
Tumber of such cases removed from their Homes in the several localities for treatment in Isolation Hospital.	Fevers.	Enteric or	: 9	.: 7	• •	: :	:	$\infty$
r of such cases removed fres in the several localities forment in Isolation Hospital	,	Diphtheria	ಲ ಣ	$\vdash$	• •	: :	7	4
		Scarlatina	18	: ന	<b>—</b> со	C1 CO	21	06
Number of Homes in men		Rod Ilama	55	• •	• •	• •		22
cality, the	Fevers.		: 65	: :	• •	:⊣	:	4
each lc dge of Health.	Fe	Enteric or Typhoid	24	: 23	: :		•	26
Sickness in eac the knowledge I Officer of Hea		Birbhthqid	17		: :	::	18	42
of to lica		Ranitalina	22	: ന	<b>—</b> с	07 m	25	101
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Population all ages	I	Census 189	47514	:	•	:	7	4.014
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Names of l		tnese Statistics; Fr stitutions being sh separate localities.	Cheltenham	General Hospital	Children's Hos	Workhouse	E	LOTALS

### SALE OF FOOD AND DRUGS ACT.

Return of Articles submitted to the Public Analyst, during the year 1896, with the Results of Analyses.

(G. Embrey, Esq., Gloucester, Public Analyst).

Samples all submitted by Superintendent Donald McRae.

### Quarter ending March 31st.

		Gambon Charles 11201011 Clift.
	Articles sub	nitted. Result.
6	Samples of	Butter All Genuine.
12	,,	Milk, 11 Genuine, 1 containing 10 per cent. of added
		water, summoned but case dismissed, Analyst
		certificate not being complete.
1	, <b>22</b>	Lard Genuine.
1	,,,	Coffee ,,
		Quarter ending June 30th.
14	Samples of	Milk All Genuine.
	,,	Butter ,,
5 2 2 1	,,	Pepper ,,
2	,,	Lard ,,
1	,,	Whiskey ,,
		Quarter anding Sentember 20th
		Quarter ending September 30th.
3	Samples of	Milk, 2 Genuine, 1 containing 5 per cent. of added
~		water, Fined 10/- and £1 8s. 9d. costs.
5	"	Butter All Genuine.
4	"	Lard ,,
2	"	Sugar ,,
5 4 2 2 2	"	Coffee ,,
$\frac{2}{2}$	,,	Pepper ,, Gin ,,
	"	Whiskey ,,
Т	2.7	winskey ,,
		Quarter ending December 31st.
6	Samples of	Milk, 3 Genuine and 3 poor.
6 9	,,	Butter All Genuine.
4	,,	Coffee, 3 Genuine, 1 containing 86 per cent. of
		Chicory added, Fined £1 and 18s. 3d. costs.
3	"	Pepper All Genuine.
1	"	Cocoa, containing 33 per cent. added sugar, and 25
		per cent. added starch, and 42 per cent. cocoa,
		Fined £2 and 18s. 3d. costs.
1	11	Lard Genuine

# THE METEOROLOGY OF CHELTENHAM.

Abstract of Meteorological Observations taken at the Modern School, Cheltenham, during 1896, by Richard Tyrer, B.A., F.R. Met. Soc.

Latitude 51° 54′ 57″ N. Longitude 2° 3′ 21″ W. Height above Mean Sea Level, 190ft

(The Instruments are all of the highest quality, and have been verified at Kew.)

	Ozone. 0-10		(				1.9									18.2	2.1	14
Rainfall.	No. of Rainy	Days.	(	13	ರಾ	25		7	14	12	15	23	23		25	185	15	13
Rai	Tot	rall.	D .	92.0	0.37		0.78	0.57	1.98	1:18	2.27	14.67	2.83	0.05	3.17	21.54	1.79	12
U		%	88	06	87	85	28	84	84	84	68	95	88	88	1037	98	111	
Rela Hum			%	05	06	87	81	73	79	.72	78	98	68	98	87	866	83	10
	نه ا	Date.		20	27	30	- 2	က	22	87	22	21	28	9	24			6
	and Min	Min.	) Man. O	24.0	21.2	25.3	29.5	29.0	40.8	40.2	41.0	35.8	26.5	21.2	24.4			$\infty$
	Absolute Max. and Min.	Date.		15	19	24	19	12 & 31	15	20	12	3 & 15	က	12	26 & 30			7
AIR TEWPERATURE.	A	Max.		53.6	55.1	64.4	8.99	0.62	84:0	86.2	74.5	0.69	65.5	52.5	53.0			9
AIR TEW	ls of	Min.	0	35.2	9.88	38.7	9.68	41.9	51.8	52.0	48.9	50.4	38.4	32.3	34.3	497.1	41.4	5
	Means of	Max.	0	45.0	46.2	52.3	56.9	66.5	72.6	73.1	9.49	0.89	51.9	45.5	44.2	684.5	57.0	4
		9 P.III.	0	39.4	39.5	44.7	46.4	52.5	60.5	2.09	56.7	54.5	43.0	38.4	39.7	575.7	48.0	3
	9	e a.m.	0	9.68	39.5	44.7	48:7	54.5	63.1	63.5	58.8	6.99	43.9	37.1	39.1	589.1	49.1	2
	Mean of Pressure at 9 a.m.	and p.m.	INCHES.	30.363	30.328	29.805	30.183	30.259	29.942	30.023	30.029	29.63	29.751	30.160	29.811	360.366	30.030	
	Month.			January	February	March	April	$ ext{May}$	June	July	August	September	October	November	December	Totals	Means	

### NOTES ON THE TABLES.

COLUMN 1 is the mean reading of the Barometer at 9 a.m., and 9 p.m., corrected for temperature and reduced to mean sea-level.

Columns 4 to 9.—The maximum and minimum thermometers are read

and set at 9 p.m., and the readings entered to the same day.

Columns 10 and 11.—The relative humidity is calculated by dividing the elastic force of aqueous-vapour at the temperature of the dew-point for the month by that at the temperature of the air.

Column 14.—Observations are taken by means of prepared tests. The amount of colour produced after 24 hours' exposure in an Ozone-cage is compared with a scale of ten degrees of colour of increasing intensity.

### WIND.

During 1896 the observations taken show that the general directions have been as follows:—

From the	North	on	39	days		From the	South	on	46	days
,,	North-East	on	18	"		,,	South-West	on	53	,,
,,	East	on	6	,,			West			
,,	South-East	on	18	,,		, ,	North-West	on	31	, ,
		CETT		$\sim$	1	0 1 1				

There were Calms on 91 days.

North Winds prevailed in May and October.

South ,, in September. South-West ,, in March.

West ,, in March, April, June, July, and August.

North-West ,, in May.

Calms ,, in January, February, October, and November.

### COMPARATIVE TABLE OF THE METEOROLOGY OF CHELTENHAM FOR THE YEARS 1878-96.

CHELTENHAM FOR THE YEARS 1878-96.												
77	heric are.	MEAN	AIR TH	EMPERA	TURE.	Hum	idity.	Rain	fall.			
Year.	Atmospheric Pressure.	Max.	Min.	Mean.	Range.	9 a.m.	9 p.m.	Inches.	Days.			
1878	Inches. 29.913	56.1	41.5	48.8	14.6	% 83	% 88	33.18	176			
1879	29.944	52.2	38.5	45.3	13.7	87	89	32.63	212			
$\begin{array}{c} 1880 \\ 1881 \end{array}$	29.971 $29.957$	55·8 55·0	40·5 38·9	48·1 46·9	15.3	85	88 85	$\begin{vmatrix} 33.72 \\ 25.28 \end{vmatrix}$	$\begin{array}{c} 177 \\ 185 \end{array}$			
1882	29.914	55.9	41.5	48.7	16·1 14·4	82 81	86	37.92	$\frac{165}{214}$			
1883	29.964	55.6	40.6	48.1	15.0	85	89	29.93	$\frac{211}{204}$			
1884	29.978	56.8	41.9	49.3	14.9	84	89	24.04	$\frac{190}{190}$			
1885	29.930	54.8	40.0	47.4	14.8	84	87	26.45	193			
1886	29.912	55.0	40.6	47.8	14.4	83	86	32.55	193			
1887	30.029	55.3	38.6	46.9	16.7	80	83	22.78	153			
1888	29.959	53.8	40.1	46.9	13.7	82	84	28.85	195			
1889	29.971	55.4	40.6	48.0	14.8	84	87	27.07	181			
1890	29.959	55.6	40.1	47.8	15.5	84	88	20.09	191			
1891	29.957	55.1	40.0	47.5	15.1	83	87	33.14	192			
1892	29.948	54.6	38.7	46.6	15.9	82	85	19.45	175			
1893	29.990	59.1	41.3	50.2	17.8	81	83	19.91	169			
1894	$29 \cdot 963$	56.2	41.6	48.9	14.6	83	87	-29.12	194			
1895	29.923	56.2	39.6	47.9	16.6	83	87	24.99	174			
1896	30.030	57.0	41.4	49.2	15.6	83	86	21.54	185			
Means	29.958	55.5	40.3	47.8	15.2	83	86	27.51	187			

# THE CLIMATE OF CHELTENHAM, 1896.

# Comparison with other Health Resorts.

Statistics for the various stations with which the Cheltenham results are compared in the following tables are courteously furnished to this Observatory by the Superintendents of the Stations, who alone are responsible for the accuracy of the data. The values for Cheltenham are so made as to be as comparable as possible with those obtained at these Stations, which are all under the control of the Royal Society. The Climatological Meteorological

	LatoT , [[stnisH	ins. 6.95	8.42	9.55	9.92	10.88	9.43	13.29	12.20
QUARTER.	Relative Humidity	%2	85	87	85	87	81	85	98
4тн Оп	Mean Daily Range of Temperature	° 12·2	2.8	9.1	12.3	10.3	8.5	8.5	6.6
	Mean Temperature	41.1	42.4	40.6	41.3	41.0	44.0	44.8	44.5
	IstoT , [[slnisA		7.32	7.31	12.37	10.79	10.55	9.63	8.00
QUARTER.	Relative Humidity	% 28	85	28	78	80	80	81	78
3rd Qu	Mean Daily Range of Temperature	0 17.5	11.1	13.8	13.2	10.8	8.6	10.6	12.0
	Меап Тетрегатиге	59.1	57.0	5.99	58.3	8.13	58.9	60.5	9.09
	IstoT ,llslnisA	ins. 3.03	2.99	6.73	4.16	3.52	3.95	4.58	2.10
QUARTER.	Relative Humidity	%2	79	71	92	74	72	62	71
2nd Qu	or remperature		10.5	16.6	15.3	13.2	11.9	11.3	13.3
	Меап Тетрегатиге	54.8	50.7	52.6	54.0	53.7	54.6	53.8	56.0
	IstoT ,[[sînisH	ins. 3·44	3.76	4.68	6.43	5.49	86.98	5.07	4.42
ARTER.	Relative Humidity	%8	85	98	88	87	84	98	85
1st Quarter	Mean Daily Range or Temperature	0.21	11.3	10.8	10.7	6.8	9.8	8.1	0.6
	Mean Temperature	41.8	41.0	40.5	41.4	41.7	44.0	43.2	44.9
		:	•	•	:	•	•	:	:
			÷	•	:	:	:	:	÷
Station.		•	:	:	•	•	:	•	÷
		CHELTENHAM	Searborough	Harrogate	Blackpool	Southport	Llandudno	Eastbourne	Torquay

The year's record is not a very remarkable one. The chief points calling for notice are the high atmospheric pressure during January and February, and the disturbed conditions throughout November and December; the very low rainfall during the first six months, on four of which less than one inch fell; the high mean temperature of March and June, and the low one of November; and the prevalence of North and North-West winds during May.

The mean temperature of the year is 49.2 degrees, which is 1.4 degrees above the average of the past nineteen years, and, with two excep-

tions, the highest during the period.

Though the number of rainy days is very slightly below the average of the past nineteen years, the fall is 5.97 ins. below. On no single day had we a fall of one inch, the heaviest, .87 ins., was on the 4th of September; on 40 days rain was only just measureable. There was almost absolute drought from the 17th April till the 20th May—32 days—during which time only 0.3 in. fell; and from the former date till the 3rd June—46 days—the total fall was only .30 in. In consequence, many of the smaller streams were quite dried up. As the preceding ten years have been comparatively dry, the subjoined table will show how the year's record differs from that period:—

			1896.	4	1887	7.—1896.
			Ins.	Days.	Ins.	Days.
1st	Quarte	er	3.44	47	4:69	45
2nd	,,		3.03	29	5.05	36
3rd	,,		8.12	50	7.27	46
4 h	,,		6.95	59	7.68	54
	Total	ls	21.54	185	24.69	181

Fog, mostly slight, occurred on 16 days; snow, very light, on three days only; thunderstorms on six days.

There was a considerable amount of wind, especially during March and December; gales occurred on 19 days.

JANUARY.—Atmospheric pressure was high at the commencement of the month, and rose gradually till the 9th, falling gradually till the 14th: it was high and steady from the 16th till the 27th, when another rise took place: in each it reached nearly 31 ins. Range of pressure, 1.496 ins.

A dull month in general, with some very bright and beautiful days at intervals. The nights were warm, the minimum temperature being below 32 degrees on eleven days only. Mean temperature 40·1 degrees, 3·6 degrees above the average of the past nineteen years.

FEBRUARY.—Atmospheric pressure was high and steady from the 1st to the 16th, falling gradually till the 20th, then rising again and remaining high and steady till the close of the month. Range of pressure, 1.081 ins.

Very changeable weather during the month: fine and beautiful days during the first fortnight, and especially so from the 9th to the 12th, then dull and cold weather followed until the 19th: after this there were some bright and much warmer days, the last week, though bright was very cold. Mean temperature 39·9 degress, 1·1 degrees above.

MARCH.—Atmospheric pressure fell rapidly at the commencement of the month, and was very low on the 3rd and 4th, when it rose rapidly,

and was generally steady till the close. Range of pressure, 1.497 ins.

The weather throughout the greater part of the month was pleasant and warm, and some of the days were beautifully fine. The last week, however, was cold and stormy. The hawthorn was in leaf on the 19th, and pear trees in bloom on the 24th. Mean temperature 45.5 degrees, 4.4 degrees above.

APRIL.—Atmospheric pressure was exceedingly steady for the first ten days, somewhat variable till the 17th and steady, with a downward ten-

dency, to the close. Range of pressure, 0.808 ins.

A very fine and pleasant month with some most beautiful days, especially during the first and third weeks. There was a great scarcity of rain, and by the end of the month the gardens wanted water badly. The cuckoo was heard on the 20th. The oak was in leaf and horse-chestnuts in bloom by the close of the month. Mean temperature 48·2 degrees, 2·2 degrees above.

MAY.—Atmospheric pressure was high and steady throughout the month, with the exception of a brief period from the 18th to the 24th.

Range of pressure, 0.596 ins.

The weather was of a remarkable character throughout. There was almost an entire absence of rain, het sun, the temperature rising above 70 degrees on nine days, while the nights were rather cold, so that the range was very great, being 24·3 degrees. The winds were dry, ranging from North-East to North-West, and there was not a single day with wind from a southerly direction. All these combined had a most injurious effect on vegetation, which was almost at a standstill. A sharp frost on the 21st killed off nearly all the early potatoes and other tender plants. The hawthorn was in bloom on the 4th, and swifts were seen on the 8th. Mean temperature 54·0 degrees, 2·2 degrees above.

JUNE.—Atmospheric pressure was rather low, but steady at the commencement of the month, when it gradually rose, falling slightly at the 17th. From the 18th to the close it was high and very steady. Range of

pressure, 0.786 ins.

The weather was very hot throughout the month, the hottest June we have hitherto had: the maximum temperature rising above 80 degrees on three days, and above 70 on nineteen. There was a fair amount of rain, with a considerable amount of cloud, and the air, especially during the evenings, was for the time of the year, very damp. Cherries, currants, and raspberries were ripe by the middle of the month. Mean temperature 62·2 degrees, 4·2 degrees above.

JULY.—Atmospheric pressure was high and steady during the greater part of the month, but somewhat irregular at the close. Range of pressure, 0.620 ins.

The weather, with the exception of a few cool days at the commencement, was hot and dry during the day, but the air was somewhat damp at night. The maximum temperature rose above 70 degrees on twenty-one days, and above 80 degrees on four. The continued want of rain had a most injurious effect on vegetation; the ground was quite dried up by the middle of the month, and a depth of nearly one foot was carried from the open water by evaporation alone. Fruit ripened early: by the end of the month peaches and several kinds of pears were ripe. Mean temperature 62·5 degrees, 2·1 degrees above.

AUGUST.—Atmospheric pressure was high and remarkably steady during the first three weeks, but rather disturbed during the last. Range of

pressure, 0.623 ins.

The weather was warm and fine during the first three weeks: there were no hot days, though some were very bright: the ground kept very dry and vegetation suffered much. The last ten days were more or less wet, and heavy rain fell at the close, of great value in filling the reservoirs, but too late to be of much use in the gardens. There was a very fine crop of out-door tomatoes, which ripened well. Mean temperature 58.2 degrees, 1.4 degrees below.

SEPTEMBER.—Atmospheric pressure was low and irregular generally for the first three weeks. There were two well-developed cyclonic systems on the 21st and 25th, accompanied by strong gales: the mercury on the 25th falling over an inch in 24 hours, and recovering again as rapidly.

It was high at the close. Range of pressure, 1.790 ins.

A very wet and unsettled month, with very equable temperature, and rather warm nights. The chief feature of the month is the abnormally heavy rainfall, the heaviest September fall since 1871: the two heaviest daily falls this year occurred in this month. Filberts and walnuts were plentiful and ripened well. Mean temperature 56.7 degrees, 1.2 degrees above.

OCTOBER.—Atmospheric pressure fell rapidly at the beginning of the month, and was very irregular till the 10th, when it rose considerably and remained steady till the 16th. There were two well-developed cyclonic systems between the 17th and the 27th; it was steady at the close. Range

of pressure, 1.335 ins.

The weather at the beginning of the month was very fine, but it speedily became very unsettled with lightning, gales, rain, and hail; then followed cold and rainy weather, and the first frost of the season occurred on the 13th. From the 18th to the close of the month the temperature was very low, ground frosts occurring on every night. Lime trees were bare much earlier than usual, and by the end of the month most of the trees had lost their leaves. Mean temperature 45.1 degrees, 2.0 degrees below.

NOVEMBER.—Atmospheric pressure was very much disturbed throughout the month; it rose rapidly at the commencement; it was low on the 7th and very low on the 14th and 15th, There was a well-developed anti-cyclone from the 20th to the 25th, after which it gradually fell. Range

of pressure 1.449 ins.

The weather was very variable. The first week was fine, bright, and calm, with low temperature; the open water was well covered with ice by the close of the first week, which is much earlier than usual, and snow fell on the hills on the 8th. There were some bright and beautiful days during the middle of the month; these were followed by some very gloomy weather, and the month closed with bright and dry days, low temperature, and considerable wind. Mean temperature 38.9 degree, 3.7 degrees below.

DECEMBER.—Atmospheric pressure was exceedingly disturbed throughout the whole month, especially at the commencement, when a persistent cyclone period lasted for several days; another, but much more brief, occurred on the 13th. From the 20th to the close of the month the pressure was high, but very unsteady. Range of pressure 1.788 ins.

The weather was generally dull and wet, with a few bright days at intervals: the last week was on the whole fine, with some very beautiful days. There were gales on three days, fog on three, and slight snow on two. A rather severe earthquake occurred on the morning of the 17th, followed by rain, snow, and hail. Mean temperature 39·2 degrees, 1·6 degrees above.

RAINFALL IN THE COUNTY OF GLOUCESTER IN 1896.

STATION.	OBSERVER.		RAIN-FALL.	RAINY DAYS.
Beckford Moreton-in-Marsh Cheltenham Bourton-on-the-Water Great Barrington Coleford R.A.C., Cirencester Berkeley Lechlade Horcott Over Court Clifton	F. Slade W. Arkell R. Tyrer E. W. Kendall H. J. Barrett I. Trotter C. C. Duncan R. Shore T. Arkell R. A. Iles R. C. C. Lippincott R. F. Sturge	1	Inches 19·86 26·69 21·54 26·41 23·04 34·26 23·44 23·83 21·27 21·83 26·53 27·33	163 157 185 159 138 209 169 159 140 129 188 175

As usual, the rainfall was somewhat unevenly distributed over the county, the greatest fall being at Coleford and the least at Beckford, the difference amounting to 14·40 ins. The number of rainy days varied also considerably, ranging from 129 at Horcott to 209 at Coleford, a difference of 80. The mean fall is 24·67 ins., which was exceeded at five stations, and the mean number of rainy days is 164.









1896

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## DELANCEY FEVER HOSPITAL.

### REPORT

FOR THE

YEAR ENDING DECEMBER 31st, 1896.

THOMAS HAILING, PRINTER, CHELTENHAM.



### → 1896 H

# Pelancey Fever Rospital

## REPORT

FOR

The Year ending December the 31st, 1896.



### DELANCEY \* FEVER \* HOSPITAL,

### 1897.

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### Trustees.

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### Collector.

MR. CHARLES SMITH, 53, REGENT STREET.

### REPORT

OF

### The Committee of Management,

For the Year ending December 31st, 1896.

Delancey Hospital, and attended with no little anxiety, inasmuch as, for the first time since the Hospital was founded, the Trustees have had to contend with a serious epidemic in the vicinity; and there seemed danger lest the permanent provision for Small-pox cases should prove insufficient and break down under the strain. In consequence, however, of the prompt measures for revaccinating the population of Cheltenham, and other precautions which were taken by the Town Council, the importation of Small-pox cases from Gloucester was kept within due bounds, and although, by permission of the Trustees, additional accommodation adjoining the Hospital was provided for 12 acute cases by the Town authorities,

and a site prepared for further extension if required, no occasion arose for their use. 23 Small-pox cases, nearly all traced directly to Gloucester, and some of them of great severity, were treated in the Small-pox block without a single fatality. The part taken by the Trustees and the Hospital Staff was recognised in the following Resolution passed by the Town Council at the close of the epidemic:

"That the thanks of the Town Council be given to "the Authorities of the Delancey Hospital, the Medical "Officer, the Matron, and staff of Nurses, for the very "splendid services they have rendered the Town and the "patients, during the danger arising from the recent epi"demic of Small-pox at Gloucester."

An epidemic of so great a magnitude in a town with which Cheltenham is in such constant communication was a severe test, and it is satisfactory to find that the machinery provided for the isolation of infectious diseases has proved equal to all that was required of it.

Without anything amounting to epidemic intensity, Scarlet Fever was of some prevalence among the poorer classes during the year, and 151 cases have been treated in the wards, again without a single death. It would be impossible even to guess at the amount of disease which is thus prevented in the Town by timely isolation, while a mortality of 1.8 per cent. of cases over a period of twenty years says much for the sanitary arrangements of the Hospital and the kindly care of the Staff. Nothing can exceed the zealous attention paid by the Matron and her staff of Nurses to the patients, usually young children, placed under their care, and the watchful superintendence

of the Institution, often under considerable difficulties, on the part of the Medical Officer, is worthy of all praise.

The portion of the "Wilson" Block devoted to Enteric Fever has scarcely been used, one case only having been admitted into the wards.

The need which has for some years been felt of accommodation for cases of Diphtheria, has induced the Trustees to still further encroach upon their capital to the extent of some £2,000 for the erection of a separate block to contain beds for this disease. An additional acre of land was purchased to the N.E. of the present site, and some progress has already been made with the building.

With this addition, the original plan of the Delancey Hospital may be considered complete, and there will probably be no town in the country so magnificently provided with the means of isolating infectious diseases as Cheltenham—and this without the expenditure of a penny of the public money. To Miss Delancey and her heirs, to the Rev. J. H. L. Gabell, to Mr. Charles Wilson,—whose death we have recently had to deplore,—to Mr. Gwinnett, the Rev. James Walker, and many others, is the credit due for this beneficent undertaking, and the Town would do well to perpetuate in some way the memory of their names.

Allusion has already been made to the great loss which the Trustees have sustained by the death of Mr. Charles Wilson, who had been their Chairman for nearly ten years, and a member of their body since 1881. He was a firm and constant friend to the Hospital, not only by his generous contributions to its funds (the "Wilson" Block having been mainly built by his aid), but by diligent attendance at the

meetings, and an active interest in every thing connected with the Hospital and its working.

To the office of Chairman thus rendered vacant, the Trustees have elected Mr. R. V. Vassar Smith, and Mr. Moles takes the place of Alderman Wethered as a Trustee appointed by the Town Council.

Considerable expenses have been incurred in the erection of new buildings. The mortuary had to be removed and rebuilt upon another site, and the accommodation for storage of coal had to be increased. A new lift has been introduced into the Gabell Block, which will be of very great service in supplying the new wards with food, etc., and additional warming apparatus has been brought to the corridor connecting the two Blocks, so that patients while being interviewed through glass by their friends may be in no danger from cold or draughts.

Besides the costs of these necessary improvements, however, the main expenditure incurred during the past year has been in connection with the provisions which were made for coping with the epidemic above referred to, and which included not only precautionary measures for the isolation of the buildings and the provision of the additional bedding and appliances necessary to deal with any considerable outbreak, but the provision and maintenance of a large and efficient staff of nurses which for several months was kept in readiness for any emergency.

The charges made for the cases treated fell very far short of the amount spent, and for the first time in the history of the Hospital, the expenditure for the year has in consequence exceeded the current income by nearly £250.

The Trustees must therefore look to the generosity of subscribers and others to make good the loss which the Hospital has sustained.

They have to acknowledge a grant from the Town Council of £50 towards this excess of expenditure, which amounts to nearly £300; also £2 2s. share of collection at the Cheltenham Festival, £5 5s. from Miss Lloyd, £5 from Sir Brook Kay, Bart., and £3 3s. from Miss Roch.

Many kind friends have favoured the Hospital with gifts during the year—a list of which will be found on another page—for these the Trustees desire to return their thanks, and also to the Board of Governors of the General Hospital for the continued use of their Board Room.



# List of Gifts to the Delancey Fever Hospital, 1896.

Anonymous, per Dr. Garrett . Books, Magazines.

The Rev. Clifford Aston ... Grapes.

Mrs. Barber ... Flowers.

Mr. Barnett ... Turkey.

Mrs. Bellamy .. Two Picture Books.

Mrs. Bruce-Pryce .. Piano, Petticoats, Old Linen, and Flowers.

Mr. McCall .. Dozen Blankets, 4 Pairs of Sheets, 2 Pillow Cases, Counterpane, Mattress, Pillow.

Cambray Flower Mission .. Flowers.

Miss Chapman .. Xmas Cards.

Mrs. Cox .. A quantity of "Little Folks," and "Boys' Own Paper."

Mrs. Cornelius .. "Graphics," "Sunday At Home."

Miss Cunningham .. "Graphics."

Mr. and Mrs. Crawfurd .. Box of Oranges.

Miss Crawfurd .. Three Boxes of Oranges.

Mrs. Currie .. Toys for Xmas Tree.

Mr. Dartnall .. Pears.

Mrs. Daubeny .. Clothes, etc.

Mrs. Davids .. Illustrated Papers.

Mrs. Evans .. Twenty "Chamber's Journal,"

11 "Leisure Hour."

Editor of "Examiner" .. "Examiner" (weekly).

Mrs. Flecker .. Oranges.

Miss Fletcher .. Papers.

Major Griffith .. Books, Toys, Clothes.

Colonel Griffiths	"Graphics," "Black and White."
Charlton Kings Harvest	· ·
Thanksgiving	Flowers.
Mrs. Harries	Clothes.
Miss Harries	Toys for Xmas Tree.
Miss Hill	Book.
Mr. Hill	Toys for Xmas Tree.
Miss Holder	Flowers.
Mr. How	Crackers, Figs, Walnuts, etc.
Colonel Kettlewell	Clothes.
Mrs. Kempson (Dursley)	Toys.
Mr. Kunz	Crackers, Toys for Xmas Tree.
Lance and Co	Remnants, Print and Flannellette.
Mrs. Lowndes	Clothes.
Misses A. and T. Locke-Jones	Crackers.
Mrs. Marshall	Jam, Raspberry Syrup.
Mr. Marshall	Five Dolls.
Mr. New	Ornaments for Xmas Tree.
Miss Owen	Books, Games.
Miss Parry	Scrap Album, "Harper's Magazines."
Mr. Potter (the late), per } Mrs. St. Clair-Ford	"Graphics," and "Illustrated London News."
The Queen's Hotel	Papers.
Dr. Renton	Illustrated Papers.
Miss Ridley	Illustrated Papers.
Mrs. Rogerson	Books.
St. Matthew's Flower Mission	Flowers.
Messrs. Shirer and Haddon	Oak Table.
Mrs. Theobald	Toys, Books, Magazines, Clothes.
Mrs. Thompson	"Graphics," etc.
Misses Voile	Clothes, Old Linen.
The Rev. J. G. Walker	Grapes, Cream, Ham, Cakes, Buns, Raspberry Vinegar, Lemon Syrup, Oranges, Turkey, "Illustrated London News" (weekly), "Daily Graphics," Monthly Magazines, Books, 6 Shirts.

Mrs. Wallace		Slippers.
Captain Welch		"Graphics," Bibles, etc.
Mr. Chas. Wilson (the late) .		25/- for clothing for Small-pox Patients.
Dr. E. T. Wilson	•	Xmas Cards, Evergreens.
Mrs. Witts	•	Books, Games, 2 Old Carpets.
Mrs. Wigget		Magazines.
Mrs. Woof		Dolls.



### Towards Amusement Fund and Amas Entertainment.

					£	s.	d.
Miss Babington (towards	harmo	nium)	• •	• •	0	10	0
Mrs. Barry-Browne					0	2	6
Mrs. Bruce-Pryce		• •	• •	• •	I	0	0
Mr. McCall		• •	• •		0	9	0
Mrs. Cardew					0	2	6
Miss Chapman		, .	• •	• •	0	5	0
Mrs. Clift					0	10	6
Miss Croydon		• •			0	3	0
Mrs. Cox	• •		• •		I	10	0
Mrs. Day '			• •		I	0	0
A. A. Dighton, Esq.			• •		0	5	0
Mrs. Flecker					0	10	0
The Baron de Ferrieres		• •			I	0	0
Mrs. St. Clair-Ford	• •		• •		0	5	0
Colonel Geddes			•	• •	0	5	0
Colonel Griffiths	• •	• •			0	Io	0

Major Griffith .	•	• •	• •	• •		£o	10	0
Miss Gillilan	•	• •	• •	• •	• •	1	0	0
Mr. Gurney	•	• •	• •			0	10	0
In Hospital Mon	ney Box	• •	• •			0	8	0
Mrs. Jopp	•	• •	• •	• •	. ,	1	0	0
Sir Brook Kay		• •	• •	• •		0	10	0
Colonel Kettlewe	:11	• •	• •	• •	• •	0	5	0
Mr. Kewley		• •	• •	• •		0	10	0
Mrs. Locke-Jones	S	• •	• •	• •		0	5	0
Miss Mallam		• •	• •			0	2	0
Miss Mellor	,	• •		• •		0	I	0
Mr. Moulder	•	• •	• •	• •		0	2	6
Mr. Norman		• •	• •	• •		0	10	0
Miss Parry		• •	• •	• •		0	5	0
Miss Rock		. ,	• •	• •		0	16	0
Miss Ross		• •	• •	• •		0	3	6
Messrs. Shirer an	d Haddo	n	• •	• •		0	5	O
R. V. Vassar Sm	ith, Esq.	• •	• •	• •	• •	5	0	0
Mrs. Southwood		• •	• •	• •		0	5	0
Mrs. Searle		• •	• •	• •	• •	0	10	0
Mrs. Theobald		• •	• •	• •		I	0	0
Mrs. Wallace		• •	4 6	• •		0	12	6
T. Williams, Esq.	•	• •	• •	• •	• •	0	10	0
Captain Welch		• •	• •	• •	• •	0	10	0
Miss Wood (Utto	xeter)	• •	• •			0	10	0
The Misses Voile		• •	• •	• •	• •	I	I	0



### Report of the Medical Officer

OF THE

### DELANCEY FEVER HOSPITAL

TO THE TRUSTEES,

For the Year ending December 31st, 1896.

Mr. CHAIRMAN AND GENTLEMEN,

URING the past year 178 cases in all have been received at the Hospital. Of these, 23 were Small-pox (including 3 quarantine cases), I Enteric Fever, 150 Scarlet Fever, and 4 were Quarantine, or suspected cases, sent into isolation wards for observation, and discharged after a sufficient time had elapsed to enable a diagnosis to be made.

The past year has been rendered noticeable by the occurrence of the epidemic of Small-pox at Gloucester, and the consequent introduction of some cases into Cheltenham. The first case was admitted in January, and was quickly followed by others; the last one being discharged in August. In all, 23 cases were received. Of these, 16 were undoubtedly traced to Gloucester, some being workmen employed there daily, others having visited infected quarters there. In four cases the

origin was doubtful, and with one exception it was not conveyed from any one family to another in Cheltenham, -each case as it arose being promptly isolated in your Hospital. The one exception was that of a person who was in attendance upon a case a few days before its detection and removal, and who refused to be re-vaccinated until too late. Her arrival in the Hospital was anticipated and her bed prepared. attack was a severe one of the confluent type, and I am strongly of opinion that it might have been avoided altogether (or considerably modified) had she consented to be vaccinated at once when the case she was nursing had been diagnosed as Small-pox. As it was she would only consent some few days after the first case was removed, when it was too late to ensure anything but a slight protection. Out of the cases admitted, 3 were unvaccinated, and 17 over ten years of age and not re-vaccinated. With regard to them I can only repeat the fact, so well known to all Small-pox Hospitals, that the severity of the attack was very different in those who were unvaccinated to those who had been re-vaccinated. In some cases, though the history of the infection the unmistakable pustules and the course of the disease made the diagnosis positive, yet the attack was so slight, and the effects of the illness so little felt, that for some time the patients refused to believe they were suffering from Small-pox. On the other hand, amongst the unvaccinated the attack assumed its severe and loathsome forms, with all the attendant misery of the confluent type. It is hardly necessary to say that no nurse, ward maid, laundry maid, or other attendant, all of whom were protected by re-vaccination, suffered from the disease.

Passing on to the consideration of the Scarlet Fever cases, I have little fresh to say. The cases towards the end of the year have been the most severe, and the throat complications more pronounced. The average time of detention in the Hospital has somewhat increased. The shortest time has been 38 days, and the longest 69 days. Three

cases have been admitted from the General Hospital, and four from the Children's Hospital. In all these cases the Scarlet Fever was accompanied by other disease, and I am pleased to say they have all done well.

As regards Enteric cases, only one, and that a private case, has been received.

It is with much satisfaction that I am able to report that it is now two years since we have had a death in the Hospital out of a total of 263 cases, comprising Scarlet Fever, Small-pox, Enteric and Diphtheria.

I have the honour to be,

Gentlemen,

Your obedient Servant,

E. COCKS JOHNSTON.



### General Statement.

Total Cases admitted for the Year ending December 31st, 1896, viz.

Small-pox (includi	ng 3 (	quarantin	e)	23
Scarlet Fever	• • •	• • •	• • •	150
Diphtheria	• • •	• • •	•••	0
Enteric Fever	• • •	• • •	• • •	1
Quarantine	• • •	• • •	• • •	4
			_	
				178

CASES OF DIPHTHERIA.

T222 O T					0 1	02 1	
Total	4	<b>C1</b>	ಣ		10	19	<u>c</u> 4
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9681	67	1				22	
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<u> 8881</u>							
1892							
1681							
0681							
6881		0.7	<b>C3</b>		37	7	
8881			,—·			-	
_788I		· .			0.7	2	
9881							
3881	F					I	
¥88I					ಣ	4	*7
1883					2	2	
1882							
1881							
0881							
6481				1			
8781							
148I							
9481							
G781							
₹48I							
YEAR	Treated in Private Wards	By Town Council	By Leckhampton Lc. Bd.	By Board of Guardians	By Payment	Total Cases	Deaths

\* The Nurse who attended one of these cases and subsequently succumbed. † Two of these cases were Nurses on the Staff.

				·	-inches						
IstoT	194	54	842	63	7.1	45	13	283	14	1580	29
9681	4		92	18		27	4	ĬĊ		150	
9681	$\infty$		56	4		2		9		78	
₹68I	0		102	$\infty$				9		126	1
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768I	10	67	203	6	19	50	-	9	4	259	10
1681	<u></u>		44	6.1	60			16	က	7.1	2
0681		27	49	ಣ	3	0.1	-	27	4	115	
688I	4		$ \infty $		4			14		31	
1888			ಣ					6.1		$ \infty $	1+
788I	5		70		0.1			4		17	1
9881	12		13				0.1	9		34	
<b>3881</b>	4		18	e0		-		23		50	
788I	21		32		62			15		71	
E881	6		50	67				30		46	
1882	9		$\infty$					24		39	*
1881	31		2					20		54	<del>, -</del> -i
0881	4	•						28		32	
6281	$\infty$							12		21	
8781	<u></u>							13		20 21	
2281	10		10					6		29	
YEAR.	Wards	In College Sanatorium	Council	By Board of Guardians	By Leckhampton Lc. Bd.	By Charlton Kings Lc.Bd.	By General Hospital	Private Payment	of Staff	S (1)	
Y	In Private Wards	In College	By Town Council		ŧ	By Charlto		By	Members of Staff	Total Cases	Deaths .

In 1883 two cases of Diphtheritic Sore Throat were admitted, and one case of supposed Scarlet Fever. In 1884 one of the cases admitted as Scarlet Fever was discovered to be a case of Measles.

Average stay in the Hospital, 1896, 52'02 days.

Death rate, 20 years, 1'83 per cent.

Death rate, 1896, 'o per cent.

\* The death in 1882 occurred within 12 hours of admission.
+ Suffering from Kidney Disease and extensive Dropsy before admission.

			WARRY CONTRACTOR					
Total	51	4	33		ಣ	19	70	<del>ب</del>
9681	19		20			ಬ	23	
_968I_					1			
₹68I	ಣ		01		1		ಣ	14.0
<u>8681</u>	ର			-			2	
1892								
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388I	0.7		-		ಣ		<b>プ</b> ロ	<del></del>
<u></u> \$881	02		02				භ	
_1883			*			_		
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<u> 1881</u>	6.4						2	
0881						4	4	
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448I_	0.7	က					4	
9281	0.7						2	F-1
678I				07			e0	<del></del>
<b>₽78</b> I	9			4		4	$\infty$	6.1
YEAR.	Independent Outbreaks	Treated in Private Wards	By Town Council	By Board of Guardians	By Leckhampton Lc. Bd.	By Payment	Cases	
	Indepe	Treated		1	edin P		Total Cases	Deaths

\* In 1883 a mother and three children were admitted as a precautionary measure from a house where a child was supposed to have died of Small-pox.
† One of these was not reported until recovered, and was treated at home.
‡ Three of these were quarantine or doubtful.

### CASES OF ENTERIC FEVER.

YEAR.			1895	1896	Total
By Town Council	•••	,	2		2
In Private Wards	• • •	• • •		1	1
Total Cases	• • •	• • •	2	1	3
Deaths	• • •	• •			

### Rules and Regulations.

I.—The Trustees shall meet (by permission of Meetings the Board of Governors) at the Cheltenham General Hospital, or at such other places as they shall from time to time appoint, not less than four times in the year, on the 2nd Wednesday in January, April, July, and October, or at any time on being summoned by the Secretary. Three to form a quorum. The Meeting in January shall be the Annual Meeting.

II.—A Committee, consisting of not less than Committee of Management seven Trustees, shall be appointed at the January Meeting in each year, to be called "The Committee of Management," any two of whom shall be a quorum. Their duties shall be to meet not less than once in each month, at such places as they shall appoint, to supervise and regulate the Hospital in all its departments, until the January Meeting following; and to prepare a report of the previous year, to be presented to the Trustees at the close of their year of office.

III.—The Committee of Management shall have power to frame bye-laws from time to time for the regulation of the Hospital, subject confirmation, or otherwise, at the next ensuing meeting of the Trustees. They shall have power to engage or dismiss nurses or servants, and to make arrangements for medical attendance, as from time to time may seem expedient.

They shall audit all accounts, and order payment thereof; they shall provide all necessaries which may be required.

Also provide, as they think fit, for the maintenance of order and subordination at all times in the Hospital.

Subscriptions

IV.—Annual subscriptions for the general support of the Hospital, shall be due on the 1st January, and together with donations may be paid to the Treasurer, or to any of the Cheltenham Banks.

Admission of Patients

V.—Previous to the admission of any patient at least THREE HOURS' NOTICE must be given at the Delancey Hospital, either by letter or messenger.

If, at the same time, application be made by a patient who is the only affected person of the family, and by another in whose family more than one is affected, the preference shall be given to that patient who is the only one in the family affected.

VI.—On admission a Medical Certificate must be produced, stating that the patient is suffering from Small-pox, Scarlet Fever, or Typhoid, and is in a fit state for removal; also a form of engagement (to be had on application at the Hospital) signed in the case of persons receiving Union relief, by the Board of Guardians or their officer; and in other cases by the Sanitary Authority of the district from whence the patient comes, or by some responsible person interested on behalf of the patient.

Each person will be required to bring, on admission, a proper supply of body linen for change and cleanliness.

It is advised that no more than is absolutely necessary of stuff clothing be brought into the Hospital, and on leaving, these should, if possible, be allowed to remain in the building.

All articles of clothing should be marked, or the Matron cannot render herself responsible for their safety.

Ambulance

Special Ambulances for Small-pox and Scarlet Fever may be had on application at the Delancey Hospital.

VII.—Patients of the Artisan class, and Public Wards poor patients within the Cheltenham Union, suffering from Small-pox, Scarlet Fever or Typhoid, will be admitted to the public wards, so far as accommodation will afford, at a charge of 3s. 6d. per day, the total payment not to exceed £7 7s.; such charge to include medicine, nursing, necessary food and wine, washing and disinfection of clothing, and medical attendance; except in the case of patients occupying a house rated for the poor at  $f_{1,25}$  or upwards per annum, and not sent in by order of any Sanitary Authority, when the Fees for Medical Attendance will be charged as an extra, unless they prefer to employ their own Medical Attendant. Servants of Subscribers of not less than 21s. per annum, or donors of 10 guineas will be received on the above terms at 2s. per diem, the total charge not to exceed £5; also patients sent in by order of any Sanitary Authority by whom an annual subsidy agreed upon by the Trustees and Local Authority has been paid to the Hospital.

The Authorities of the Cheltenham General Hospital shall be permitted to send to the public wards of the Delancey Fever Hospital, gratuitously, any case of Small-pox, Scarlet Fever, or Diphtheria which may break out in the General Hospital.

N.B.—All expenses connected with taking patients to and from the Hospital must be paid by the patients or by those responsible for them.

VIII.—Annual Subscribers of one guinea Private Wards (each subscription to be bonâ fide for the year, and not to commence with the admission of a patient), or Donors of ten guineas or upwards, may send members of their household\* to the private wards, so far as accommodation will permit at a charge

<sup>\*</sup>This does not apply to Boarders in Schools, or Inmates of Hotels and Boarding Houses, for whom special arrangements can be made.

of 5s. per day, the total charge under this head not to exceed £10 10s.; such charge to include ordinary nursing, food (not malt liquor, wines or delicacies), cooking, washing and disinfection of personal clothing, but not medicines or fees for medical attendance.

Visitors

Visitors to the town or neighbourhood for a less period than three months may at any time, on payment of one guinea, rank as subscribers to the Hospital.

Schools

For Schools, the Annual subscription beyond one guinea for *bonâ fide* members of household, shall be at the rate of one guinea for every ten boarders or fraction of ten.

When two children of a subscriber, members of the same household, are admitted, they may, subject to the approval of their medical attendant, occupy a private ward in common at the reduced charge of 7s. 6d. per diem for the two.

To non-Subscribers or Subscribers of less than a guinea per annum, the charges in private wards are double those for Subscribers.

Nurses

IX.—The cost of extra nurses, provided by the Hospital authorities, shall be divided amongst the patients requiring their services. Nurses provided by friends of a patient will be charged 10s. per week for board, and must conform in all respects to the rules of the Hospital, and be under the general control of the Matron.

Parents or Friends

X.—In the event of a parent or other relative or friend desiring to accompany a patient, and to remain in the Hospital, they can only do so by sharing the ward and taking their part in the nursing; the charge for board (exclusive of washing, malt liquors, wine and delicacies), and disinfection of personal clothing to be 5s. a day.

XI.—The charges for board and residence of Administrative convalescents or friends in the Administrative Block will be:—

Adults - - -  $\pounds$ I o o each—per week Under I4 years of age o I5 o ,, ,, Servants - - - o IO o ,, ,,

XII.—In the case of private patients the Medical Officer of the Hospital will either undertake Attendance the entire charge and treatment at the usual fees, or the friends of the patient may employ their own medical attendant, who will then be held entirely responsible, and will be required to attend on any emergency. Patients admitted to the public wards by order of the Town Council or any other Health Authority shall be attended by the Medical Officer of the Hospital; others not so sent in may if they desire be attended by their own Medical man.

XIII.—Visitors are admitted to the building visitors on Tuesdays and Saturdays only, between the hours of 2 and 4.30 p.m., but not more than two persons, and those over 14 years of age shall be admitted to see any one patient. Exceptions may be made in cases of special urgency.

XIV.—The Committee of Management shall Medicines make such provision for dispensing medicine as circumstances require.

XV.—The Trustees may, from time to time, Alteration of make any alteration in the foregoing rules, or make Rules such new rules as they in their discretion may think fit.

### LIST OF

### SUBSCRIPTIONS AND DONATIONS

TO DECEMBER 31st, 1896,

TO .

### The Delancey Hever Hospital.



## Donors of Ten. Guineas and upwards (SEE RULE VIII).

Barnard, Major.	Prothero, Henry A., Esq.
Barnes, Miss	Shuldham, Mrs.
Crow, Rev. E.	Wynniatt, Mrs. J. W.

				£	s.	d.
Abbott, Mrs.	* * *	• • •	• • •	1	I	0
Adkin, Rev. H. K.		• • •		1	1	0
Adlard, W., Esq.		• • •	• • •	1	I	0
Agg, Colonel, J.P.	• • •		• • •	I	I	0
Agg-Gardner, J. T.	Esq., J.P.	• • •	• • •	3	3	0
Alexander, W., Esq.	• • •		• • •	I	I	0
Anley, J. L., Esq.	• • •			I	Ī	0
Armstrong, Mrs.	,	• • •		I	I	0

Ashton, Dr.	1 0 0	• • •	••• 5	£τ	1	0
Aston, Rev. W. Cliffo	ord	•••	•••	I		0
Atkins, Messrs. G. ar	d Son	• • •	• • •	I		0
Austin, Colonel	• • •			I		0
Aylmer, C. W., Esq.	* • •	• • •		I	I	0
Babbage, Major-Gene	eral			I	I	0
Bagnall, W. H., Esq.	• • •	• • •		I	I	0
Bainbridge, General	• • •	• • •	• • •	I	I	0
Bain, Mrs. W. L.	• • •	3 <b>0</b> •		I	I	0
Baker, W. M., Esq.	• • •	• • •		1	I	0
Baker, Mrs. Aufrere				I	I	0
Baker, Miss	• • •	• • •		0	5	0
Baller, Mrs.	• • •	u • •	• • •	I	1	0
Bamber, Miss		• • •		I	I	0
Banks, Mr. J. J.		• • •		0	10	6
Batchelor, Mrs.		•		I	I	0
Bate, C. J., Esq.	• • •	•••		I	I	0
Bean, Major-General		• • •		1	I	0
Beasley, R. St. John,	Esq.			I	I	0
Beckingsale, Mr. A.	• • •	• • •	• • •	1	1	0
Belcher, Mrs.		• • •		2	2	0
Bennett, E. A., Esq.		•••		I	I	0
Bennett, Miss	• • •	• • •		I	I	0
Bennett, Mrs. Courter	nay	• • •		0	IO	0
Bentley, Mrs	• • •	• • •	• •	I	I	0
Bevan, Mrs.	• • •	• • •		1	r	0
Bingham, W. Baring,	Esq.	• • •	• • •	3	3	0
Birchall, Miss E. S.	• • •	• • •		I	I	0
Blaxland, Colonel	* * *	•••		I	I	0
Bloodworth and Son,	Messrs.	• • •	• • • .	1	1	0

Booker, R. A., Esq.	•••	• • •		· · · ±	Ç I	I	Э
Bott, Mrs	• • •	• • •	(don.)	• • •	0	5	0
Bradish, Major W.	• • •	,		• • •	I	I	0
Bramwell, Dr. J. W.	• • •			• • •	I	I	0
Brett, Mrs. H.	¢ • •	• • •		* h >	Ι	I	0
Brett, Mrs. J.	• • •	• • •			I	I	0
Brewster, John, Esq.	• • •	• •			1	I	0
Brodhurst, W. H., Esq	•••	• • •			ı	I	0
Burge, Mrs.	• • •			• • •	I	I	0
Bushnell, A. J. de H.,	Esq.	••			I	I	0
Butt, T. P. W., Esq.	• • •			• • •	I	1	0
Cade, F. J., Esq.	¢ • :	• • •			1	I	0
Cadell, Colonel	• • •				r	I	0
Caines, Miss	• • •			• •	I	I	0
Calcott, Colonel Berke	eley	• • •		• • •	I	1	0
Campbell, J. Hunter,	Esq.	• • •			I	I	0
Campbell, W., Esq.	• • •	• • •			I	0	0
Cardew, G. A., Esq.	• • •	• • •			I	I	0
Carrington, Mrs.	• • •	• • •		• • •	J	I	0
Carter, E., Esq.		• • •			I	I	0
Cavendish House Com	pany, Ltd.			• • •	I	I	0
Chambers, Miss S. C.	• • •	• • •			3	3	0
Chapman, Mrs.	• • •	• • •			0	10	0
Chapman, H., Esq. (th	ne late)	• • •		• • •	I	2	6
Chase, H., Esq.	• • •	• • •		• • •	I	I	0
Cheeke, G. A., Esq.	√ C T	• • •		• • •	I	I	0
Cheltenham Gas Comp	pany	• • •		• • •	5	5	0
Cheltenham Festival So	ociety		(don.)	• • •	2	2	0
Childe, Rev. Dr. C. V	• • •	• • •		• • •	1	I	0
Christian, Vice-Admira	.l			• • •	I	Ι	0

Clapton, Rev. E.	• • •	• • •	••• >	£, 1	I	0
Clarke, Mrs. Hyde	• • •	• • •	• • •	2	2	0
Clarke, Colonel	• • •	• • •	• • •	0	IO	6
Clarke, General W. C	. Stanley	• • •		0	10	6
Clissett, J., Esq.	* * *	• • •	• • •	I	I	0
Clunes, Mrs.	• • •	• • •	• • •	I	I	0
Colledge, Major J.	• • •	• • •		I	I	0
Colmore, W. B. Crego	e, Esq.	•••		3	3	0
Consterdine, The Mis	ses	• • •	• • •	I	I	0
Cooke, Miss	• • •	• • •		Ţ	I	0
Cookes, Miss C. H.	• • •		• • •	I	I	0
Cooper, Mrs.	• • •			I	I	0
Corbyn, Deputy Surge	on-General	• • •	• • •	I	I	0
Corsellis, Miss	• • •	• • •	·	0	5	0
Cox, Mrs. J.	•••	• • •	• • •	I	10	0
Cox, Major-General W	. н.	• • •		Ţ	I	0
Croker-King, LieutCo	olonel, J.P.	• • •	• • •	Ι	I	0
Cromie, Mrs.	• •	• • •	• • •	I	I	0
Crowther, Mrs.	• • •	•••		I	I	0
Cuming, Colonel	•••	• • •	• • •	I	1	0
Cunyngham, Sir R. Di	ck, Bart.	• • •	• • •	I	I	0
Currie, G. M., Esq.	• •	• • •	• • •	I	I	0
Daley, C., Esq.	• • •	• • •	• • •	0	10	0
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Wyatt, Mrs. Nevile	•••	• • •	I	I	0
Wylde-Brown, Miss	• • •	• • •	2	2	0
Yardley, Mrs	• • •	• • •	I	I	0
York, Mrs	•••	• • •	I	I	0
Young, The Misses	• • •	• • •	2	2	0
Young, Mrs	• • •		I	I	0



### Form of Bequest.

I give the sum of £::, free of duty,

to the Delancey Fever Hospital, Cheltenham, and I

declare that the receipt of the Treasurer for the time

being of the said Hospital, shall be a sufficient dis
charge for the said legacy.

### DELANCEY

### Income Account for the Year

RECEIPTS.	C	~	ړ
Balance at close of year 1895	236	S. 2	
Subscriptions for the year 1896	477		
Donations	15		
Rents, Garden Produce and			
Sundry Income 16 0 0 Chaltenham Corporation Am			
Cheltenham Corporation Ambulance Drivers' Wages 12 0 0			
Ditto towards Fencing 21 15 0			
	49	15	0
Dividends from Investments	124	17	_
Bank Interest		5	0
*Patients Annual Grant from the Chelten-	790	0	7
ham Corporation, Current Year 200 0 0			
Ditto, Balance 1894, 1895350 0 0			
Ditto, from the Board of			
Guardians 35 0 0			
Ditto, from the Charlton Kings Urban District Council 10 10 0			
	595	10	0
Annual payment by the Chelt-	373		
enham College	100	0	0
*Exclusive of Patients' Accounts accrued to 31st December, 1896, and not paid within the year.			
	£2399	3	6

Birmingham, 13th January, 1897.

Examined in detail with the Books and Vouchers of the Treasurer and found correct,

### HOSPITAL.

### ending 31st December, 1896.

PAYMENTS.				
		£	s.	d.
Rates, Taxes and Insurance		95	8	4
Gas, Coal and Coke, and Sweep		176		9
• /		18	5	10
		34	10	10
	• • •	00	5	0
		160	10	0
	• • •	449	_	II
	• • •			8
		45		2
		245	_	_
	• • •	32		6
10 1	• >			8
TYPE TO A COLUMN T		109	_	_
	_	ΙΙ	19	7
	nd			
•	. •	4 T I	0	7
	• • •	31	2	4
Auditors' Fee	• • •	4	4	0
		2050		2
Transferred to Capital Account		200		О
Balance in hand 31st Dec., 1896	• • •	148	J 7	4

£2399 3 6

(Signed)

T. O. WILLIAMS & PAYNE,
Chartered Accountants, Auditors.

## Capital Account for the Year ending 31st December, 1896.

PAYMENTS.  £, s. d. Interest carried to Income Account	Purchase of Land The Solution of the Salance in hand on Deposit at the	County of Gloucester Bank, Ltd525 o o	£710 5 0
Amount of Canital in hand 21st	December, 1895 500 0 0  Bank Interest 10 5 0	Transferred from Income Account 200 0 0	£710 5 0

# Building Fund Account for the Wear ending 31st December, 1896.

	d.	72	
	£ s. d.	3	Chicago and Control
	X	Н	
PAYMENTS.	Balance at County of Gloucester Bank,	Ltd., 31st December, 1896.	
	Ġ.	ιΩ	
	£s. d.	3	
	X	H	
RECEIPTS.		Balance in hand 31st December 1895	

Examined in detail with the Books and Vouchers of the Treasurer, and found correct,

Birmingham, 13th January, 1896.

(Signed) T. O. Williams & Payne, Chartered Accountants, Auditors.



